
JSHUG

NEWS DIGEST

Focusing on the T199/4A Home Computer

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Membership and Subscriptions

Annual Family Dues \$35.00
Associate membership \$10.00
Overseas Airmail Dues A\$65.00
Overseas Surface Dues A\$50.00

TiSHUG Sydney Meeting

The April Meeting will start at
2.0 pm on the 6th April 1996
at Meadowbank Primary School,
Thistle Street, Meadowbank.

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I N D E X

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TiSHUG SOFTWARE FILE

MARCH 1996

By LARRY SAUNDERS

Disk AT160

Used= 353 Free= 5

Artist Instance Editor + Fonts + Instances

This Artist Instance Editor is a must for anyone who uses TI-ARTIST. It has some features that are a lot better than TI-ARTIST. The features that I liked was.

1) FILL. The FILL does not overflow at all.

2) CIRCLES. When doing CIRCLES you place the cursor at the centre and move your cursor out from the center to the size you want. At the center it leaves a temporary marker.

3) TYPE. I has a TYPE option that you can LOAD a FONT and use.

For more information refer INSTANCE EDITOR review.

BRUCE_I	10 d 80	BULLSEYE_I	8 d 80
CARTOON_F	8 d 80	CAT/SUP_I	17 d 80
CAT/WHO?_I	11 d 80	CATFENCE_I	7 d 80
ENGINE_P	25 Prog	FUNPAK_F	46 d 80
HEART_F	28 d 80	INED1	33 Prog
INED2	19 Prog	LBLAKTXT_F	35 d 80
LOAD	5 Prog	PARLOR_P	25 Prog
PRNINST	16 Prog	PRNINST2	16 Prog
PRNINST24	16 Prog	ROOT	28 Prog

Diskname G161
Used= 356 Free= 2

Games Disk refer reviews CHAINLINK, SUBCOMARD, TENNIES.

CHAINLINK	31*Prog		
DEAL01	2 I106	DEAL02	2 I106
DEAL03	2 I106	DEAL04	2 I106
DEAL05	2 I106	DEAL06	2 I106
DEAL07	2 I106	DEAL08	2 I106
DEAL09	2 I106	DEAL1	2 I106
DEAL10	2 I106	DEAL11	2 I106
DEAL12	2 I106	DEAL13	2 I106
DEAL14	2 I106	DEAL15	2 I106
DEAL16	2 I106	DEAL17	2 I106
DEAL18	2 I106	DEAL19	2 I106
DEAL2	2 I106	DEAL20	2 I106
DEAL21	2 I106	DEAL22	2 I106
DEAL23	2 I106	DEAL24	2 I106
DEAL25	2 I106	DEAL26	3 I106
DEAL27	3 I106	DEAL28	3 I106

DEAL29	3 I106	DEAL3	2 I106
DEAL30	3 I106	DEAL31	3 I106
DEAL32	3 I106	DEAL33	3 I106
DEAL34	3 I106	DEAL35	3 I106
DEAL36	3 I106	DEAL37	3 I106
DEAL38	3 I106	DEAL39	3 I106
DEAL40	3 I106	DEAL41	3 I106
DEAL42	3 I106	DEAL43	2 I106
DEAL44	2 I106	DEAL45	2 I106
DEAL46	2 I106	DEAL47	2 I106
DEAL48	2 I106	DEAL49	2 I106
DEAL50	2 I106	LOAD	5 Prog
ROOT	28 Prog	SUBM	33*Prog
SUBN	9*Prog	TENNIS	33*Prog
TENNIS-DOC	28*d 80	TENNIT	33*Prog
TENNIU	33*Prog		

Diskname U162
Used= 353 Free= 5

Part 1 Comic Animator.

Refer review COMIC ANIMATOR.

COLOR	9*D 80	COMIC-3D	5*D 80
COMIC/2	36*D 80	COMIC/DOCS	46*d 80
E/A	33*Prog	E/A-LOAD	10*Prog
FILE/L2	9*Prog	GGARF1	5*Prog
GGARF2	25*Prog	GGARF3	23*Prog
GGARF4	7*Prog	GGARF5	9*Prog
GGHOST	5*Prog	GGHOSU	25*Prog
GGHOSV	18*Prog	LOAD	19 Prog
PIC-COMP1	8*D 80	PIC-COMP2	8*D 80
PIC-SHOW1	7*D 80	PIC-SHOW2	6*D 80
PPLUTO	5*Prog	PPLUTP	25*Prog
PPLUTQ	10*Prog		

Diskname U163
Used= 354 Free= 4

Part 2 Comic Animator.

Refer review COMIC ANIMATOR.

BBAELLE	5*Prog	BBAELLF	25*Prog
BBAELLG	23*Prog	BBAEL LH	3*Prog
BBAELLI	16*Prog	BBOXROTATE	5*Prog
BBOXROTATF	25*Prog	BBOXROTATG	22*Prog
BBOXROTATH	10*Prog	BBOXROTATI	20*Prog
BBOXROTATJ	23*Prog	BBOXROTATK	21*Prog
BBOXROTATL	8*Prog	BBREIT	5*Prog
BBREIU	25*Prog	BBREIV	23*Prog
BBREIW	23*Prog	BBREIX	23*Prog
BBREIY	21*Prog	BBREIZ	12*Prog
LOAD	16 Prog		

END OF ARTICLE 

TIshUG SOFTWARE FILE REVIEW

MARCH 1996

Edited by LARRY SAUNDERS

SUBJECT : Chainlink Master Solitaire Copyright (C) 1989 Walt Howe and Wayne Stith Program Design: Walt Howe Program Implementation: Wayne Stith Documentation: Walt Howe

CHAINLINK is one of the most challenging of all solitaire card games. It offers a high solution rate if played very well, but it never ceases to present a challenge to the good player. About 50 percent of all games are solvable, but for the beginner, it may take many games before the first solution comes. When CHAINLINK is dealt out on screen, the entire deck of cards is visible. There are no hidden or face down cards. With all the cards visible, there is no luck factor after the cards are dealt. It entirely depends on your skill in playing.

Object of the Game

The object, as with most solitaire games, is to build all the cards in order from ace to king in each suit. Cards are played one at a time beginning with the aces into four piles at the top of the screen, one for each suit. When you have all 13 cards in each suit played to the four top piles, you have won the game.

The Layout

The cards are initially dealt into 13 columns of 4 cards forming the card layout or tableau. Each column is labeled with a letter, ranging from A to M.

The Rules

The rules are simpler than most solitaire games. These rules apply to play with actual cards as well as on the computer.

1. Only one card may be played at a time.
2. Only the bottom card of any column may be played. This applies to cards played within the tableau and to cards played to the top four piles. No cards can ever be played from the middle or top of a column until the cards below it are played first.
3. In the tableau, a card may only be played directly on another card of the same suit and one less or one greater in sequence. For example, the six of diamonds may only be played on the five of diamonds or the seven of diamonds. The six of diamonds must be the bottom card of its column,

and the five or seven must be the bottom card in its column, also.

4. The top four piles must begin with the aces of the four suits. They may be played any time they are the bottom card of a column in the tableau. Subsequent additions to the top four piles must be in order from ace to king. Any time the card at the bottom of a column is the next card in sequence for the top pile of its suit, it may be played to the top pile.
5. Empty columns may only be filled by kings. Any king can fill any empty column, but only if it is the bottom card of another column.
6. No column can contain more than 10 cards.
7. A deal may be restarted from the beginning position at any time. (Of course, this rule is virtually impossible with an actual deck of cards.)
8. The last card played may be taken back to its former position at any time until another play begins.
9. These rules are enforced by the computer. It is not possible to cheat in this solitaire game.

Getting Started

The program loads from the Editor/Assembler cartridge (or equivalent) or from Extended BASIC. From Extended BASIC, place the disk in drive 1 before you select Extended BASIC and it will load automatically. If you are already in Extended BASIC before inserting the disk, type RUN "DSK1.LOAD" with the Chainlink disk in drive 1.

From the Editor Assembler cartridge, select option 5 and type in the filename DSKn.CHAINLINK, where "n" is the number of the drive. Other options you can use are TI-Writer option 3, the FUNNELWEB program image file loader, or other similar loaders. When the program is loaded, the title screen is displayed. Simply press the <Enter> key to begin play. The cards are then dealt and the menu appears below the tableau. The options are as follows:

1. Begin. If you select this option, the menu is cleared from the screen and all possible moves to the top piles are automatically made for you.
2. Reddeal. If you do not like the current deal, you can select another deal with this option.
3. Read rules. An abbreviated, but complete set of rules and keypress instructions is available by selecting this option. When you have finished, the same deal will be displayed again.
4. Save game. If you want to save the deal for future use, you can select this option and you will be prompted for a filename. You will have later chances to save the game, also.

5. Load game. You can restore a saved game with this option. When you select it, you are prompted for the name of the saved file.
6. Quit. This option exits the game without saving the current deal.

Mechanics of Play

All play is controlled by key presses, as follows:

1. All possible plays to the top piles are made any time you press the <Enter> key.
2. Plays within the tableau from one column to another are controlled by pressing first the letter of the column you want to move a card from and then the letter of the column you want to move to.
3. If you want to repeat the same move when you are moving a series of cards in order one at a time, just press the R key.
4. If you want to take back a move, press Function 1. This is known as the OOPS key, for those cases where you pressed the wrong key. Once you have pressed another key, the OOPS key will not work, whether or not you have actually moved another card.
5. Any time you want to save a game to disk, press Function 2. It will save the original deal, but not the position of the cards after play has started. You can abort a save by pressing Function 4.
6. Any time you want to reload an old deal, press Function 3. You can abort the Load with Function 4.
7. Your first deal in any session is dealt visibly with moving cards. If you get tired of seeing the cards dealt out, press Function 5 while the menu is still on the screen and you will toggle off the visible deal. To restore it, press Function 5 again while the menu is on screen.
8. When you are stuck in a game or just want to quit, press Function 8. It will display your score in won games and percentage of cards played and ask if you want to save the game. Next it will ask if you want to play again. If you say Y for yes, it will deal a fresh deal for you to try.
9. Any time you want to restart the current deal, press Function 9 (the Back key). It will redeal the same deal and display the menu again.

Strategy

The name CHAINLINK comes from the strategy of building a chain of cards in sequence in the tableau. It is often more important to build sequences than it is to play cards to the top piles. A linked chain is one which has its two ends in different columns, allowing you to move either way. Try to break the two-column link only when you are working to extend the chain further. There will be many cases when you cannot do this,

of course, but only break the two-column structure when you have to. Another desirable position is to have inverted sequences with a king at the bottom and one or more columns empty. This is another type of linked chain, since the king can move into the empty column at any time. Even if you have several sequences with kings at the bottom, one empty column gives you a lot of flexibility. When you have one or more kings at the bottom and no empty columns, developing an empty column should be a prime goal.

When you can see no way to extend chains, then work on freeing aces and subsequent cards to the top piles. The more cards that are played to the top, the simpler the remaining play becomes.

Never play a card on a column when both cards that it can move onto will both be in the same column beneath it. Sometimes an initial deal will include this arrangement. If you see this arrangement, redeal immediately. The game cannot be solved. A similar stuck position is when the interior cards of a sequence of four are at the bottom of columns and the exterior cards are above them in the same columns. If you recognize these positions while the menu is still on the screen and redeal, the game does not count against your total score.

Set yourself goals as you improve your play of the game. While you are still learning, just solving a game is a triumph. Later, you will want to see how high a card score or game score you can get in a series. Try for 5 wins in 10 games or 10 wins in 20 games. 13 wins in a 20 game series is outstanding! Can you top it without using the Function 9 key at any time?

The Challenge Game

The game disk includes 50 saved games that are all guaranteed solvable. Some are very easy, some are extremely difficult. Can you solve all 50 games?

CHAINLINK NOW PUBLIC DOMAIN!

CHAINLINK, formerly a commercial product of Genial Computerware, has now been placed into public domain by the authors, Walt Howe and Wayne Stith. Enjoy!

END OF ARTICLE 

TISHUG SOFTWARE FILE

By Larry Saunders

Diskname U164
Used= 349 Free= 9

FX Sound Effects program and Sound files.

FX	32*Prog	HELICOP1	95 D128
ITATTAW	44 D128	LOAD	7*Prog
PHONE	57 D128	SENTYA	49 D128
THANKYOU	45 D128	TYMPANI	20 D128

Disk#1:U165
Used= 353 Free= 5

Sound Effects files

ACCIDENT	21 D128	ALBERT	55 D128
AMEN!	11 D128	BART-SHH	44 D128
BUTTKISS	11 D128	CHEER-UP	25 D128
DOC	61 D128	DONTWANT	23 D128
EATMYSH	21 D128	EYES	45 D128
GWEETING	15 D128	OKIEDOKE	21 D128

Diskname G166
Used= 482 Free= 236

Casino program . Keno. BlackJack, Poker etc.

!README	17 d 80 A	10*Prog
A1	36*Prog A2	28*Prog
A3	22*Prog A4	41*Prog
A5	28*Prog A6	43*Prog
A7	17*Prog A8	37*Prog
ACCT	2 I 10 ACCT3	1 I 20
B	10*Prog C	10*Prog
D	10*Prog E	10*Prog
F	10*Prog G	10*Prog
H	10*Prog I	10*Prog
J	10*Prog K	10*Prog
L	10*Prog LOAD	38*Prog
M	10*Prog MENU	42*Prog

Diskname G167
Used= 321 Free= 37

Tunnels of Doom cracked Module + 3 games to play.

CITYTOD	52 Prog	LOAD	5 Prog
PENNIES	52 Prog	ROOT	28 Prog
TOD1	33 Prog	TOD2	33 Prog

TOD3 33 Prog TOD4 33 Prog
TUNNELS 52 Prog

TISHUG Software HELP File

Edited By Larry Saunders

COMPUTER WAR

THE DISPLAY:

1. The score of the current game is displayed in the top left of the right window. The high score of the current session is displayed in the top right of the screen.
2. The map of the United States shows the location of all the cities targeted by enemy missiles and the NORAD headquarters. Your task is to defend these cities.
3. The left of the screen shows a matrix and below this is the current DEFCON (defence condition). 5 is the start of the game. 1 is game over with all cities and NORAD destroyed.

How to play:

1. Press the fire button on the joystick to start the game. Do not touch the fire button again until it is absolutely necessary.
2. From the edges of the screen, enemy missiles will appear, advancing towards selected targets. Move the cross on the screen (with joystick) until it is immediately over the advancing missile. At this point press fire button.
3. The display will change from one of two: If the missile was in the center of the cross, then the display will become that of a fighter pilot through the cockpit window. Beneath the screen are three boxes, depicting current DEFCON status (on the left), the time until impact of enemy missile (on right) and in the center is a box depicting where the enemy missile is in relationship to the view from the cockpit. To chase the missile, move the joystick towards the missile's location. To move left or right, push the joystick in the appropriate direction. To move up, pull the joystick back, and to dive, push the joystick forward. When the missile is in view, press the fire button. Ammunition is unlimited, so keep firing until the missile is destroyed. When time until impact indicator reaches 10, an alarm will sound.

4. If you do not destroy the enemy missile in the allotted time, you will lose a city.

5. If the cross was not positioned correctly over a missile the message NO ENEMY MISSILES IN INTERCEPT RANGE will appear. The game will return to the map screen, but you will not be given a second chance to knock-out that particular missile.

6. After all missiles in a wave have either been destroyed or have hit their targets, the bonus screen is presented. At the middle left of the screen in a 3x3 matrix, is the code you have to match. This is achieved by moving the white 3x3 square around the screen above until a similar mix is achieved. If an identical mix does not exist, then patterns can be built by spinning the squares by pressing the fire button. When an identical match is found, press the fire button again and the computer will move onto the next square to be matched. If all matches are made, then a bonus of 1000 points is added to your score.

7. The game then re-starts with further attacks of missiles, in increasing number and speed.

The game is over when all cities and NORAD are destroyed. Even if all cities are intact, should NORAD be destroyed, then the game is over. As each city is destroyed, the DEFCON factor is reduced. Game is over if DEFCON reaches 1.

Scoring

150 points per enemy missile shot down.

1000 points for a full code screen cracked.

1000 subsequent points each additional time the code screen is cracked.

TiSHUG Software File HELP TIPS

Edited By Larry Saunders

SUBMARINE COMMANDER

Turn monitor, peripheral system and computer on in that sequence. Insert module (either Xbasic, E/A, or MiniMem, select LOAD & RUN, type in DSK1.GAMES. A menu will be presented. Select Submarine Commander. The game will load and begin to execute.

The controls

Joystick: optional To surface: Pull the joystick towards you (down)...this pushes the submarines nose up.

To dive: push the joystick away from you (up); the nose goes down.

Rudder Control: Pull the joystick to the left or right. Use in conjunction with the compass setting (see instrument panel).

Keyboard

Active keys are:

E>Surface

X>Dive

S>move left

D>move right

1>abort mission

2>START game

3>Report

4>Dive

5>Blow ballast

6>Forward

7>Reverse

8>Fire Torpedo

9>Map

0>Sonar Screen

=>Periscope

SPACE BAR>pause

To surface: press up arrow (E)

To dive: press down arrow (X)

Rudder: left arrow (S) to move left and right arrow (D) to move right. Direction: FORWARD (6) or REVERSE

(7) to change direction and speed. Crash dive (4) or Blow Ballast (5) to rapidly change your depth. Dive or surface to neutralize either of these directions.

How to play

1. After the title, the computer asks you to choose a skill level (1-3). Press the space bar for the number you want. Press START (2) when you are ready.

2. The map in the center of the screen shows your position (black cross) and of the enemy convoys (white dots). The object is to track down the convoys and sink all the ships. The enemy is composed of the following: Destroyer, Tanker and Freighter. You score tonnage points for sinking ships, with more points for tankers and freighters than for destroyers. The enemy ships are armed with shells and depth charges and can cause you heavy damage. If they detect you they may attack or take evasive action to try to lose you. To attack the target, you have the following equipment:

MAP: Press MAP (9) to establish your position relative to land and convoys at any time.

SONAR: Press SONAR (0) for a picture of the sea around you; ships within range show up as blips on the screen.

PERISCOPE: Press PERISCOPE (=) when you are at a depth of 40 feet, and you will get a view of any ship within range that is in your line of sight. Use this mode to prepare for an attack.

TORPEDOES: When you are at a depth of less than 30 feet, press the fire button on the joystick, or FIRE (8) to release a torpedo. Aim it ahead of the target ship.

The following is a mock-up of the instrument panel:

```

AAAAA HHHHHHHHHHHHHHHHHHHHHH IIII
AAAAA H H IIII
AAAAA H H
AAAAA H H JJJJ
      H H JJJJ
BBBBB H H
BBBBB H H KKKKK
      H H
CCCCC H H LLLLL
CCCCC H H LLLLL
      H H LLLLL
DDDDDD H H LLLLL
      H H
EEEEEE H H N MMM
      H H N MMM
FFFFFF H H N MMM
      H H N MMM
GGGGGG HHHHHHHHHHHHHHHHHHHH N MMM
  
```

The diagram above shows the relative position of the gauges on the panel, and the description below tells what each are used for. At the beginning of each mission, you are allocated quantities of torpedoes, fuel, air, and battery charge (See skill-level for details). You must be careful not to run out of any of these. You speed is initially set at NIL, and you have to press either FORWARD (6) or REVERSE (7) to start moving.

In detail, the controls are as follows:

- A....Attitude: Move joyst left/right or arrow keys to change course.
- B....Compass: The compass reading determines the course you steer.
- C....Clock: This times how long missions last.
- D....torpedoes: The two digits on the left are the

number of torpedoes remaining. Next to these are torpedo status indicators. These can be any of the following colors: (a) light blue(cyan)=priming. (B) Dark blue=loading (c) Red=ready to fire (d) Yellow=tube out of action.

- E....Fuel supply
- F....Battery charge reading: To re-charge, you must surface.
- G....Speed: When the sub is in the blue (cyan) area, the sub is moving forward. When it is in the green area, the attitude dial causes the compass and depth dials to move in the opposite direction.
- H....Sonar screen: Shows the enemy ships as white blips. Your position is the black cross in the center which remains static. When an enemy ship is correctly lined up, the blip will appear directly above the cross, or at some point between it, and the edge of the screen.
- I....Depth in feet.
- J....Hydrophone chart: This is the longest range dial on the screen. The nearer a ships is to your submarine, the closer the relevant peak is to the left of the dial.
- K....Tonnage sunk. The amount recorded is in thousands of tons (Ktons).
- L....Depth below keel: Be careful when diving. This shows the water below you.
- M....Damage indicators: These show damage as a square ranging from empty (no damage) to full (severe damage), to (C=controls), (I=instruments), (H=hull) or (E=engines). You may carry on without waiting for repairs, but beware of unexpected malfunctions. (Your sub is repaired automatically. However, repairs are carried out more rapidly on the surface). If your hull damage becomes severe, it may crack...with a watery grave awaiting you.
- N....Air supply: Can be renewed by surfacing.

SKILL LEVELS

The higher the skill level, the more challenging the game becomes. You will in your encounters with the enemy, have t attack and destroy more convoys with less fuel, charge and torpedoes.

TACTICS

You constantly need to assess the pros and cons of moving on the surface or underwater. Running on the surface is quicker, but if you get too close to an enemy convoy on the surface, you will be seen and attacked by the escorting warships. To warn you, a bell sounds

TISHUG SOFTWARE FILE REVIEW

Edited by LARRY SAUNDERS

as you approach the enemy's range of vision on the surface.

Your greatest advantage over the enemy is your ability to travel underwater. However, this does use up air and batteries, and you can still be detected if you fire a torpedo.

As your initial working tactics, try approaching an enemy convoy on the surface using the map(9) mode. As you draw near, dive and locate the ships with your sonar(0) and hydrophone chart. Then come to a depth of about 25 feet and press periscope(=) for a view of the surface. Aim you sub at the target, press the trigger on the joyst or fire(8) to release a torpedo, aiming it ahead of the ship. Hits are recorded on the 'tonnage' sunk chart on the right. If you are under heavy attack from the surface ships and wish to lose them, dive deep and wait till the attack is over.

END OF GAME

The game ends when any of the following occurs: (a) all enemy convoys are sunk; (b) all oxygen is used; (c) all fuel and charge is used; (d) there is severe damage to the hull.

The game can be terminated by pressing abort(1). You still receive a rating of your abilities as a Submarine Commander.

RATING

At the end of each game, you receive a rating (score) with points awarded for tonnage sunk and the ultimate achievement of a Submarine Commander...elimination of all convoys. Points are deducted for fuel and torpedoes used, and damage sustained.

Summary of factors affecting your rating:

Points given for:

- (a) tonnage sunk
- (b) Sinking all convoys proportional to skill level

Points deducted for:

- (a) fuel used
- (b) Torpedoes used
- (c) Damage incurred
- (d) Being destroyed

END OF ARTICLE 

SUBJECT : TENNIS PROGRAM FOR THE TI-99/4A

This tennis program features most of the actions of a real tennis match, including:

- - serves
- - forehand and backhand shots
- - lobs, volleys
- - balls out or in the net
- - defensive or offensive play
- tie-breaker - scores announced by the referee via the speech synthesizer

And even better, you can play against a wonderful partner: the TI-99/4A COMPUTER, or against a second player.

Three different levels allow you to select a perfect partner, really adapted to your training and skill, from beginner to pro.

Furthermore, a live demonstration game between two computer players will show you how realistic the action is, and perfectly illustrate all the capabilities of this program.

Bruno DURIEZ - Albert LORIDAN

II- SELECTING GAME OPTIONS

The introduction screen appears, announcing the program. After a few seconds, a demonstration game starts automatically, showing live action. Press BACK then any key to get the option selection screen.

TENNIS OPTION SELECTION		
1	2	
PLAYER	PLAYERS	DEMO
NOVICE	--0	
AMATEUR		
PRO		

Select the level and the number of players (or a demonstration game) by moving the small racket shown in the chart by using the joystick or the arrow keys (S,D,E,X).

Press ENTER or FIRE once your selection is made.

You are then prompted for the name of the players. You can also give a name to the computer champion. If you do not enter a name, the computer will just assign a standard one to allow distinguishing the two players on the score board. Note that a colored player indicates the color of the player to which the name is assigned. Then

the following message appears at the bottom of the screen:

"REMOVE THE ALPHA-LOCK THEN PRESS ENTER"

You are now ready to start your tennis match.

III- PLAYING A TENNIS MATCH

Move the players with the joysticks. Press the FIRE button to swing the racket in order to hit the ball. You can position the player to receive the ball either in forehand or in backhand.

When you press the FIRE button, the racket starts moving. the direction of the shot is determined by the relative position ball/racket when the coincidence is detected.

SERVING:

When it is your turn to serve, use your joystick to give the direction of the ball, relatively to the serve area (left, center or right) but also the strength of your serve (up or down for fast serve, center position for normal serve). Then press FIRE while keeping the joystick in the selected position. If your first serve is out, you are naturally given a second chance. the probability of success is related to the direction and strength you selected as in a real tennis game.

POSITIONING THE PLAYER TO RETURN THE BALL:

Moving your player to the right (resp. left) results automatically in a positioning of his racket for a forehand shot (resp. backhand shot). However, in order to allow a fine positioning of the player, this one can move a few steps left or right before the racket gets actually positioned. In any case, hitting the FIRE button results in moving the racket from backhand to forehand and vice versa.

RETURNING THE BALL:

The ball speed control can be achieved by the player motion when this one hits the ball.

- - if the player moves towards the net, the ball will be accelerated.
- - if the player moves backward, the shot will be a lob if the opponent is close to the net.
- - if the player does not move vertically, the ball will be hit at normal speed.

The ball direction is also affected.

SCORING:

All the TENNIS rules are respected. the players change side after every odd game. The referee announces the score. The match takes place in five sets. A TIE-BREAKER game takes place when necessary.

LEVELS:

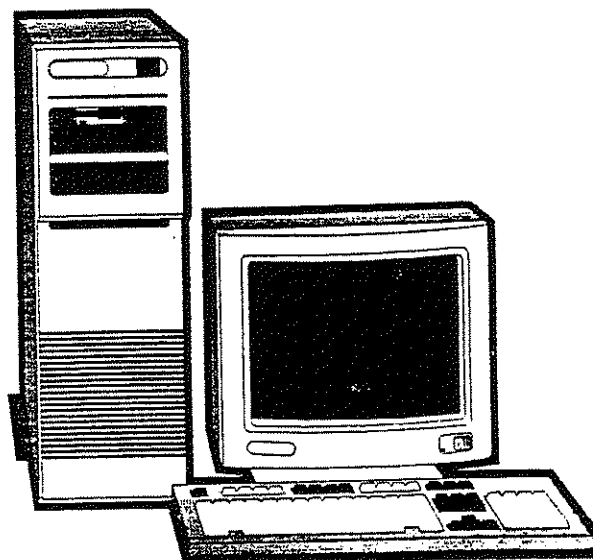
The three levels are characterized by the pace of the action and by the increasing aggressiveness of the computer champion. At NOVICE level, the

computer champion returns the ball in your direction and is not aggressive. At PRO level, the champion becomes merciless: he alternates fast and normal shots, executes lobs and volleys. He won't let you breathe a second. At AMATEUR level, the computer champion plays at an intermediate level, but be careful: sometime he will play as a real pro. At the end of a match, the level and the number of players is displayed allowing to testify the level of a performance.

SPECIAL OPTIONS:

- - PAUSE: pressing the SPACE BAR results in stopping temporarily the action. Press any other key to resume the game.
- - SPEED: the keys + and - allow to increase or decrease by step the pace of the game.
- - COLOR: the color of the court can be changed by pressing the function key followed by 1, 2 or 3. This simulates various kind of tennis courts (grass, clay or decoturf).
- - REDO: the key sequence FUNCTION REDO allows to restart a match from beginning.
- - BACK: the key sequence FUNCTION BACK allows to go back to the options selection screen.

END OF ARTICLE 



TIshUG SOFTWARE FILE REVIEW

Edited by LARRY SAUNDERS

SUBJECT: COMIC-SHOW EDITOR

Original Documentation Translated by: J. FREDERICKS
and KEN GILLILAND

English Version of COMIC-SHOW EDITOR and
expanded DOCS by: RAY KAZMER

OVERVIEW: CREATING A COMIC SHOW WITH THE CONVERTED EDITOR

All "animation" must FIRST be drawn with TI-ARTIST. COMIC SHOW EDITOR only arranges TI-ARTIST pictures ("_P") into runnable assembly code. There is no "easy way" to make animated COMIC-SHOWS, but your rewards can be great, if you stick with it. Using the EDITOR IS a snap! Other files in the COMIC-SHOW package are COLOR, COMIC-3D, PIC-COMP1, PIC-COMP2, PIC-SHOW1, and PIC-SHOW2. Descriptions of what these other programs are supposed to do, were NOT included in the original German documentation. Since the EDITOR seems to work well by itself, all the other files (above) are IGNORED in the following instructions but ARE included on this disk, in case you wish to experiment. NOTE: Only the EDITOR itself was translated (99%) into English.

We will be discussing ONLY the EDITOR, named "COMIC/2" on this disk. Creating animated COMIC-SHOWS from TI-ARTIST pictures is a "two-step" process. ARTIST pictures must FIRST be "compressed" (into a "squeezed format") which can be "previewed" with the EDITOR. (VERY helpful when "debugging" your creation.) When satisfied with the results, you can then "compile" your "squeezed" files into a "stand-alone" COMIC-SHOW, which can then be RUN from OUTSIDE the COMIC SHOW EDITOR environment.

WARNING: The TEX-COMP "LOAD" menus contain HIDDEN assembly routines. NEVER RESEQUENCE THESE LOAD PROGRAMS! NEVER EDIT LINES NUMBERED LESS THAN 100 or you will destroy those assembly routines! ALSO NOTE:

The "LOAD" on side 1 is different than "LOAD" on side

2. You should make back-up copies of each side of this disk and use THOSE to experiment.

LOADING THE COMIC-SHOW EDITOR

The EDITOR uses option 3 "LOAD & RUN" of the EDITOR ASSEMBLER module. A "simulated" E/A MODULE LOADER is supplied, on this disk. After "E/A" loads, select OPT. 3, "LOAD & RUN" from the E/A menu. For "FILE NAME?" type: DSK1.COMIC/2 and <ENTER>. The EDITOR auto-starts.

USING THE COMIC SHOW EDITOR

SPECIAL NOTE: During MOST operations, pressing FCTN/9 will abort ALL previous commands and return you to the MAIN MENU. This key-press is NOT shown on-screen at any time, but IS intermittently active.

MAIN MENU PRESS:

- 1 BUILD CONTROL FILE
- 2 VIEW CONTROL FILE
- 3 SAVE FINAL VERSION
- 4 DISK DRIVES IN USE? (1)
- 5 END

After loading the EDITOR, your first consideration must be option 4. Press your "4" key to tell the EDITOR how many drives you are using, from 1 to 5 drives. The number "recycles" to 1 after 5.

1 BUILD CONTROL FILE (COMPRESS TI-ARTIST PICTURES, THE 1ST STEP)

This "reminder" appears on your screen: "_P FILENAMES".

Below that, a prompt for the drive number, which will contain your "DATA DISK" (the disk containing your PREDRAWN SERIES of TI-ARTIST "_P" PICTURES.) You must now INPUT the SEQUENCE of your "_P" pictures in a LOOP. Example:

DSK1.GARF1_P My "GARFIELD AND ODIE" was comprised of 6 TI-ARTIST

DSK1.GARF2_P pictures. Their filenames were entered EXACTLY as I have shown here

DSK1.GARF3_P.

DSK1.GARF4_P

DSK1.GARF5_P

DSK1.GARF6_P <-NOTE: After entering the LAST PICTURE in a SERIES, you

DSK1.GARF5_P must build your CONTROL FILE to "LOOP" back, through

DSK1.GARF4_P the series, in order to get a good "fluid motion" in

DSK1.GARF3_P your COMIC SHOW. The last filename entered (bottom of

DSK1.GARF2_P the CONTROL FILE you're writing) MUST MATCH the first

DSK1.GARF1_P filename, at the TOP of this list. If it doesn't, the first picture will be shown only ONCE

(when the COMIC SHOW first runs) and WILL BE SKIPPED OVER AFTERWARDS!

One more "DSK1." prompt will appear at the bottom of this list. To go on with the process, merely press <ENTER> with a "blank" for a file-name (press <ENTER> It should be noted that the "color" portions ("_C") of your TI-ARTIST files, are NOT used. You can also shorten ARTIST filenames before you do this process, to make things easier. This example would also work:

DSK1.G1

DSK1.G2

DSK1.G3 -etc. The EDITOR doesn't need the "_P" tag to compress ARTIST pictures, however, if you intend to retain your pictures, in ARTIST format, to RELOAD into TI-ARTIST for corrections (and there WILL be corrections!) then the "_P" MUST be retained.

You must use at least 2 TI-ARTIST pictures, but NO MORE than 100!

After writing the CONTROL FILE list and pressing <ENTER> twice you're prompted for a "SHOW-NAME." This is a TEMPORARY TITLE, into which all of the pictures will be "compressed" and stored for later use. I used a SHOW-NAME of: DSK1.TEST1 (Keep it simple and easily remembered.) After entering a SHOW-NAME, a prompt follows, asking: "PAUSE BETWEEN READ/Writes? (Y/N)" (The "J" stands for "ja" the only "German" still in the EDITOR. Sorry, I couldn't find THAT with ADVANCED DIAGNOSTICS!) The "PAUSE" will probably be necessary (to swap disks) if you have 15 or more pictures in your CONTROL FILE and are using only 1 SSSD drive.

After this prompt is answered, the EDITOR starts making "compressed" files, starting with the SHOW-NAME you entered. Example: TEST1, TEST2, TEST3, etc. Original ARTIST pictures are not changed, only "read." A screen display is shown, above each "TEST" filename being created, which gives you the file size (in BYTES) of each new "TEST" file.

A second screen display shows a running TOTAL (in BYTES) of the size of the SHOW-NAME file you are creating.

A third screen display shows "SECTORS FREE" on your "WRITE DISK." If using only 1 SSSD drive and this number hits zero, the WRITE-DISK is full and the EDITOR will stop with an ERROR MESSAGE. But, if using a DSSD or DSDD drive and this number hits zero, the EDITOR continues creating the files. This number is based on SSSD and is NOT correct when using any other drive types! (Don't worry about it.) If an error occurs in any READ/WRITE, you are given three choices:

1-CORRECT (an incorrect filename. Works, sometimes.)
2-REPEAT (last function. Another error usually results.)

3-IGNORE AND GO ON (locked up my console when I tried it.)

The BEST BET is to go SLOW and ensure you hit NO

errors. If an error does occur, the FCTN/9 key IS active at this point and you may save a lot of time and grief for yourself, by merely starting over.

2- VIEW CONTROL FILE

This function "previews" a COMIC SHOW, using your "TEST" files. When prompted, type in the SHOW-NAME you used. (Example: my "DSK1.TEST1.") "VIEW" will NOT work on uncompressed ARTIST pictures, a CONTROL FILE MUST be made first. When your "SHOW" RUNS, 2 keys will be active: "+" = SLOW Picture Sequence "-" = SPEED Picture Sequence.

This will be the first time you will see your COMIC SHOW "in motion." If corrections are to be made, you must make them on the ORIGINAL TI-ARTIST pictures, with TI-ARTIST, then re-process those pictures with BUILD CONTROL FILE again, before "testing" your changes with "VIEW."

3- SAVE FINAL VERSION (COMPILE STAND-ALONE PROGRAM, THE 2ND STEP)

After you attain whatever degree of perfection your patience allows, you are given two choices, with this final step:

PRESS 1- VIEW-FILE LOADER

2- EA/5 LOADER

Pressing "1" results in a further compacted series of "PROGRAM" files which can ONLY be loaded via the VIEW CONTROL FILE function of COMIC SHOW EDITOR. (There seems to be NO logical reason for THIS choice!) "2" results in a genuine "stand-alone" COMIC SHOW which can be loaded via option 5 of the E/A MODULE or many other loaders usually found in User Group Libraries or on BB's. (I used THIS choice to save GGARF1.) You will be prompted for the SHOW-NAME (my DSK1.TEST1.)

Then, you are prompted for a "SAVE-NAME." THIS IS YOUR FINAL SAVE AND THE FIRST TWO LETTERS OF THE FILENAME YOU SELECT NOW, MUST BE THE SAME! Example: my SAVE-NAME for "GARFIELD AND ODIE" was: DSK1.GGARF1, seen as

PINBALL

Author Unknown

the FIRST file of my creation, if you decide to catalog this disk.

The DOUBLE FIRST LETTER is the "identifier" COMIC SHOW EDITOR builds into it's stand-alone programs, the same way TI-ARTIST uses it's "_P" to identify a legitimate picture. If you forget to enter the doubled letter, the EDITOR will double the SECOND letter in a SAVE-NAME.

(My GGARFI would have been called "AARF1".) Even if you DO forget, there is no big problem in re-naming all the files later. But REMEMBER: The FIRST LETTER MUST BE A DOUBLE LETTER, or your COMIC SHOW won't run!

CLOSING NOTE

"GARFIELD AND ODIE" was my VERY FIRST ATTEMPT at using the COMIC SHOW EDITOR. If you enjoyed it, or found these DOCS were a help, or if you were inspired enough, by my "translation" of the COMIC SHOW EDITOR to give it a shot. I certainly WOULDN'T mind finding a couple of dollars in my mailbox! (Yes, \$2.00, IN CASH would be OK!) Thank you, A BUNCH! RAY KAZMER 13225 AZORES AVE., SYLMAR, CA. 91342 USA

END OF ARTICLE 

Software wanted

Does anyone know of any existing computer programmes, suitable for either the TI99/4A or IBM, which will

Simulate a printing calculator, that is, as each new number is entered, it will scroll the previous values up the screen, but allow them all to be recalled when needed;

Generate random data files, which would be created to mimic real data (number of columns per record, range of values per column) to allow thorough testing of e.g., survey analysis programmes.

Any help in locating these programmes would be much appreciated by Michael Haynes, telephone (02)9958.8332 - evenings or weekends.

At school, I played pinball when I was supposed to be in class. At Uni, I played pinball when I was supposed to be reading Shakespeare. At work, I play pinball when I should be getting my stories written. you get the idea. I like pinball.

That's why I was so excited to get my hands on a copy of 21st century Entertainment's Pinball Dreams Deluxe. Within minutes, I'd installed the game on my system, taken the phone of the hook and put the "do not disturb" sign on the door to my office

As pinball games go, pinball Dreams deluxe isn't bad. Game play is fast and enjoyable. There are two things you immediately look for in a video pinball game: ball action and the flipper response. here, both are quick. the graphics and sound effects are first rate. All eight tables are a pleasure to look at, and the accompanying soundtrack complements the game's fast pace Without ever becoming distracting.

Recreating the look and feel of a full-size pinball table on a computer screen is a problem that has faced designers of computer pinball games for years. The developers of the Pinball Dreams Deluxe have tackled the problem by creating a screen that follows the ball as you play This has it, draw backs. For one thing, you can get dizzy after a while. Play the game for too long and you'll Start to feel like a television that needs its vertical hold adjusted. It's also hard to hit targets at the far end of the table when you can't see what you're aiming at.

There are other flaws. For instance, the colour scheme on one table is such that the flippers are hard to see distinctly and the "interactive" history of pinball that comes with the game, is neither very interesting nor very interactive.

What you have is a game " that is good, but not great. young children should like it but older kids, raised on "shoot 'em up" style video games, you will probably find this game doesn't have enough action for them.

END OF ARTICLE 

FROM the BBS

New programs and files were loaded on 30/12/95.

Does anyone have material that could be contributed for the BBS or TND magazine? If so please send to EDITOR or SYSOP, interesting and new contributions will be appreciated.

Ross Mudie, SYSOP.

TISHUG SOFTWARE FILE REVIEW

Edited by LARRY SAUNDERS

SUBJECT : Instance Editor

This is another Public Domain product from Bruce Harrison. Like so many others, it grew from a need its author had, and may prove useful to others. This product is intended to allow those without TI-Artist to easily and quickly edit Instance files for use with either TI-Artist or with the Harrison Drawing Program. You can also use this to create new Instance files from scratch. Being released to Public Domain, this disk may be copied, uploaded to BBS systems, and used in any way without the need to compensate its author. The disk also includes three small programs called PRNINST, PRNINST2, and PRNINST24, which will print one or more instances on paper. The first of those is for single density printing on 9-pin printers. The second does double density printing on 9-pin printers, while the third is designed for use on 24-pin printers.

How to Start it

The main program is in the E/A Option 5 files INED1 and INED2. There's also a LOAD program on the disk, so that the main program can be loaded and run from Extended Basic. Thus to start up from Extended Basic, you can just put the disk in drive one and select XB, so that XB will auto-load the program for you. From Editor/Assembler, you'd use Option 5, with the program file name INED1. You can also use INED1 from Funelweb or from a Ramdisk menu loader. When the program starts, there will be a menu on your screen with seven choices:

1. MAKE INSTANCE
2. SAVE INSTANCE
3. LOAD INSTANCE
4. RECALL INSTANCE
5. LOAD FONT
6. LOAD DRAWING
7. EXIT PROGRAM

Make Instance is the option to use when you wish to start with a "clean slate" to create a new instance. You'll have a white screen with numbers at the top, and the words PEN UP at the bottom. In the middle of the screen will be the drawing cursor, a small "+" in cyan. That cursor can move in any of eight directions either from the keyboard or with a joystick. You're working in Bit-Map graphics mode, and the numbers at the top of

the screen show the current dot-row and dot-column position of the cursor. To "make an impression", you'd hit either the Q key or the joystick fire button. This will change the legend at the bottom to PEN DOWN. Now every time you move the cursor, you'll create a one-pixel wide line on the screen. Pressing either Q or fire button again will toggle you back to the PEN UP condition. For other actions within the drawing mode, see below.

Let's skip over the Save Instance choice for a bit, and discuss the Load Instance option, 3 on the menu. Here, you'll get a prompt for INSTANCE FILE NAME. This needs a complete name, including the device (e.g. DSK1) and the complete name of the file, including the _I ending. Given such a name, after you press ENTER the program will attempt to open that file for reading. If the opening succeeds, the words LOADING and PLEASE WAIT PATIENTLY will appear on your screen. Loading takes some time, as the program is both reading the file and converting the strings it contains into numbers at the same time. We've done this as efficiently as possible, but it still takes time. If no errors occur during loading, the program will switch over to the Bit-Map screen mode and display the Instance. You'll be in the Drawing Mode, with the instance near the center of the screen, the cursor on screen near center, in Pen Up condition. You can use all the drawing mode functions at this point. (see below)

When you've finished editing, just press G from the drawing mode to get back to the menu. If you need to get back into editing again, press 4 from the menu to get your edited instance back. Now to save this edited instance, choose 2 from the menu. You'll get a prompt with the original name already filled in. You can of course change this at will. Like loading, saving takes some time, as the bytes comprising the instance have to be converted to strings before going out to the D/V 80 file.

The program determines the height and width required for the instance, and saves just enough bytes to describe the instance as edited. Note that if you've added things that expand the size of the instance, the file that saving creates may be larger than the original file. It pays to keep a blank disk, or one with lots of extra room available just in case your file won't fit on the original disk.

Option 4 from the menu is there mainly so that you can do other things, such as save your work or load a font, then get back to the instance you were working on. Using Option 3 or Option 6 will, however, replace your current work.

Option 5 allows you to bring in and use a different style of characters as part of your instance. Two different kinds of font files may be used. For normal-sized characters, you can use fonts in the CHARA1 type program file format. For larger and more exotic letters, you can use fonts of the TI-Artist type, which are contained in D/V 80 files whose names end with _F. When these latter are loaded, the current working image from your last loaded instance is still available, but the original image in numeric form is lost. We'll explain that a bit further on.

Option 6 is provided for those cases where you have some item that's in a picture file, and want to excerpt that into an instance. This feature allows you to load a TI-Artist Picture file (_P ending) or a picture made with our Drawing program. You can then eliminate whatever parts you don't want, and save the desired part as an instance.

Option 7 is for exiting the program. If you entered through either E/A or Funelweb, this exit will take you back to where you entered from. If you entered from Extended Basic, you'll go back to the startup Title screen. If you ran the program from a Ramdisk Menu, don't use selection 7 to exit, but press Function= (QUIT) instead.

The Drawing Mode

Whether you've loaded a picture file or an instance file, or if you've used Option 1 to start a new instance from scratch, you'll find yourself in the Drawing mode. This mode is easy to spot because there's a small "+" near the center of the screen, the words "PEN UP" in the bottom left corner of the screen, and the two numbers 85 and 125 at the top left corner. At the bottom center of the screen will be the words "VERY FAST". This means the cursor movement rate will be as fast as the program allows.

Cursor movement can be done either with Joystick (remember to release the Alpha Lock) or by using the keyboard. The cursor moves in eight directions using the joystick or the E, S, D, X, W, R, Z, and C keys. As the cursor moves, the numbers at the top left corner continually update, so that they always show the present Dot Row and Dot column at which the cursor is placed. Since we're in a PEN UP condition, the cursor movement doesn't place anything on the screen. Pressing either the joystick FIRE button or the Q key will put the pen "on the paper". The words PEN DOWN will appear in the lower left corner of the screen. When the cursor moves in the PEN DOWN condition, it will leave a single-pixel line behind it. If

needed, you can change the speed of cursor response by pressing the V (for Velocity) key. There are five speeds available, and the current one will be shown at the bottom center of the screen. The five are: VERY FAST, FAST, MEDIUM, SLOW, and VERY SLOW. Each press of the V key will change by one level, then the progression will start over at VERY FAST.

For drawing lines in directions other than the eight main compass points, there's another mode of operating for drawing. Pressing the B key puts you in that mode. The words PEN UP or PEN DOWN will be replaced by the word LINING. There will be two sets of row, column coordinates at the top of the screen, and two cursors, which will initially be at the same point. As you use either the stick or the keys to move the cursor, one of them will remain stationary at the start point. You move the other one to where you want the line to end. When you're ready, press the FIRE button or the Q key to draw a line between the two cursors. After the line is drawn, the two cursors will be at that end point, ready to continue from there. To get out of the LINING mode, press the F key.

This program can also make circles on the image. To make a circle, start by positioning the cursor where you want the center to be located. Press the 5 key. The word "CIRCLE" will appear at the bottom left corner. Now move the cursor either up, down, left, or right to a point where the circumference is to be, then press 5 again. The desired circle will be drawn very quickly, then the cursor will return to the center and you'll be back to either the PEN UP or PEN DOWN condition. The cursor is returned to the center so that it's easy to create concentric circles if needed. If part of the desired circle would be off the screen, the program will simply draw as much of the circle as will fit on the screen.

Erasure is often necessary in such work. In any drawing mode operation, you can change over from writing to erasure by pressing the T key. The word ERASER will appear at the bottom right of the screen, and all functions will work, except that the lines or circles will be erased instead of written. To get out of erasure, simply press T again.

Area filling can be done quickly and easily for any closed area in the image. You can fill a circle, rectangle, triangle or any other area by putting the cursor in the desired area and pressing the 4 key. BE VERY CAREFUL to do this only in areas that are closed on all sides, else the filling will "leak out" and turn large portions of the screen to black.

The Alphanumeric Mode

In many cases, we like to have words or letters on our instances, so there's a special mode of operation just to make it easy and quick to type things on the picture. Press the A key to get into alphanumeric mode. The PEN UP or PEN DOWN legend will be replaced by the word TYPING. The cursor position numbers at the upper left will be changed to Graphics Row and Column numbers. To move the cursor in this mode, you use the Function key with S, D, E, or X. Rows will range from 2 through 23, and columns from 1 through 32. Typing anything at the keyboard will now place text on the screen. If you've loaded a Font, the typing will appear in that type style. If the font is of the CHARA1 type, the letters will appear in normal size, and will always replace anything that gets "typed over". So long as you've not loaded a TI-Artist type Font, any Instance that you loaded is still in the memory as numbers. You can tell that this is so because you'll see the word INSTANCE at the bottom center of the screen while in typing mode. You can use this fact for several purposes. Suppose you've really messed up the edit, and want to start over. That's easy. Just get into this alpha mode, press Control-C to clear the screen, put the typing cursor where you want the upper left corner of your instance, then hit Control-I. The Instance will re-appear in its original form. This feature can also be used to replicate the instance, as we did in making the instance TWOCATS_I from the instance CATFENCE_I. If you want to replicate without erasing any of the original, you can press Control-O (for Overlay) and the instance will be overlaid without erasing whatever was already there on your screen. This works if and only if that word INSTANCE is shown at the bottom center of the screen.

If you load in a TI-Artist type Font file, that will remove the original instance from memory except as the current image on the screen.

If the font loaded is of the TI-Artist type, with _F ending on the file name, then different actions are possible. When such a font is in memory, you'll see the word REPLACE at the bottom center of the screen. This means that what you type will "cut a hole" for itself in anything you type over. By pressing Control-O, (that's the letter O, not the number 0) you can change the word REPLACE to OVERLAY. Then what you type will overlay whatever's there without cutting a hole. You can go back to replace operation by pressing Control-I. (That's the letter I, not the number 1.)

There are three other Control key operations while in the alphanumeric mode, and these must be used with

great care. Pressing Control-A will erase everything from the top of the drawing area down to and including the cursor's position. Pressing Control-B will erase everything from and including the cursor's position to the bottom of the drawing area. Pressing Control-C will wipe the entire drawing area clean.

To exit from Typing mode back to drawing mode, simply press ENTER. The drawing cursor will return to the position it was in when you entered alpha mode, with PEN UP or DOWN as it was when you went into alpha mode.

Back to the Menu

To get back to the menu, you must be in drawing, not alpha mode. Simply press G to exit back to the menu. The working image from the bit map screen will be saved into memory, the screen will clear, and the menu will appear. From the menu, you can perform any operation. If you load a new instance or picture file, you'll destroy what was saved, so be very careful to save your work to disk before loading any new starting point. Loading a FONT will not destroy your working image.

KEYPRESS SUMMARY

IN DRAWING MODE:

- E, X, S, D, R, W, C, and Z or Joystick moves cursor.
- Q or Fire Button takes pen up or down. (Toggles)
- Q or Fire in line draw places a line.
- T toggles in and out of ERASER mode.
- B enters Line Drawing mode.
- F exits Line Drawing mode.
- V changes cursor response speed.
- 4 fills in a closed area with black.
- 5 starts and completes a circle.
- A goes into Alphanumeric mode.
- G exits from drawing to menu.

IN ALPHANUMERIC (TYPING) MODE

- Function-E, -X, -S, -D moves cursor.
- Control-C clears entire drawing area.
- Control-A clears down to and including cursor.
- Control-B clears from and including cursor to bottom.
- ENTER goes back to Drawing Mode. If an INSTANCE is present:
 - Control-I Places an Instance if one is present.
 - Control-O Overlays an Instance if one is present.
- If a TI-Artist Font is present:
 - Control-I changes to REPLACE mode.
 - Control-O changes to OVERLAY mode.

Puzzle

for fun

Harrison's Help Line

If you are unsure of any aspect of using this program, you can contact the author by mail or phone:

Bruce Harrison
5705 40th Place
Hyattsville, MD 20781
U.S.A.
Phone (301)277-3467

Measurements

M	L	O	F	N	M	G	K	C	A	F	D	H	H	S
A	I	N	N	O	O	A	E	X	X	E	A	Q	B	V
R	G	L	P	R	E	T	E	M	G	C	U	I	D	K
G	H	O	L	C	V	L	W	R	R	A	Y	N	Q	Q
O	T	T	U	I	I	R	E	E	R	X	U	C	J	S
L	Y	T	N	M	S	E	T	T	N	O	P	H	D	H
I	E	J	A	O	I	E	R	E	P	M	A	R	G	T
K	A	H	T	W	M	C	C	M	O	H	T	A	F	K
T	R	L	S	I	O	N	A	O	K	A	O	T	Z	J
B	O	L	T	U	U	L	S	L	N	N	W	U	Q	J
V	U	N	T	O	B	F	I	I	O	D	S	N	R	X
T	E	E	F	S	N	T	U	K	L	R	B	O	V	Y
C	B	W	D	Y	E	K	M	Y	L	W	I	Y	C	E
T	R	C	G	R	K	D	D	O	A	M	N	E	X	M
A	L	P	Z	H	N	D	D	F	G	D	Z	P	Q	C

END OF ARTICLE



Acre	Hand	Millisecond
Ampere	Hour	Month
Bolt	Inch	Newton
Bushel	Kilogram	Ounce
Calorie	Kilometer	Pound
Centimeter	Kilowatt	Quart
Day	Knot	Ream
Degree	Light year	Ton
Fathom	Liter	Volt
Feet	Meter	Watt
Gallon	Micron	Week
Gram	Mile	

TREASURER'S REPORT

by Cyril Bohlsen

Income for March \$ 1517.00
 Expenditure for March \$ 2215.58
 Loss for March \$ 698.58
 Membership accounted for \$ 395.00 of income
 Shop sales \$ 1122.00 of income

The expenditure was made up of the following :-
 Fee for use of School premises \$ 500.00
 Printing and posting of TND \$ 236.70
 Shop purchases \$ 1178.88
 Purchase of flat bed scanner (Editor) .. \$ 300.00

JUST A ONE LINER (ED)

Q. Why will television never take the place of newspapers?
 A. Have you ever tried swatting a fly with a television.

JUST A ONE LINER (ED)

"Doctor, doctor, I've lost my memory."
 "When did this happen?"
 "When did what happen?"



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

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

The IBM SHOP

with Cyril Bohlsen

42mb Seagate ST351A/X HDD IDE	\$ 45.00
3.5" Disk storage box (100 cap)	\$ 10.00
5.25" Disk storage box (100 cap)	\$ 10.00
Parallel printer cable 2M	\$ 5.00
3 Button mouse	\$ 14.00
Mouse pad	\$ 1.50
3.5" FDD mounting kit	\$ 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
15-9 pin "D" adaptor for Monitor	\$ 6.00
Joystick "Blastick" (IBM)	\$ 20.00
CPU fan & heat sink	\$ 8.00
486 SX-25 CPU 5V (Intel)	\$ 20.00
486 DX-2/66 CPU 3.45V Texas Inst.	\$ 60.00
486 DX-2/66 CPU (IBM)	\$ 60.00
16mb Simm 72 pin with parity	\$ 530.00
4mb Simm 72 pin 70ns with Parity	\$ 200.00
1mb Simm 30 pin 70ns with Parity	\$ 55.00
256k Simm 30 pin with Parity	\$ 20.00
30-72 pin Simm adaptor	\$ 25.00

KTX Work & Play Mega Multimedia Pack
 Quad speed CD-ROM 16 Bit Sound Card
 Sterio Speakers, M/S Titles \$ 325.00

Quad Speed CD-ROM "VRTOS" \$ 160.00

Diamond Stealth Vidio Card 2mB \$ 280.00

The IBM SHOP

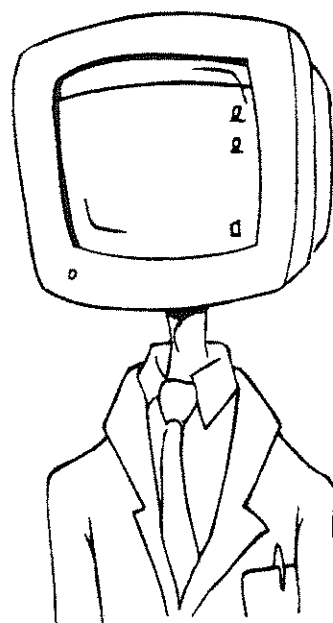
with Cyril Bohlsen

Please NOTE that TIsHUG can supply a range of computers or components to suit most requirements that you may have.

Our prices are very competitive and will be cheaper than most outside suppliers.

When you are considering buying the next piece of equipment, why not get a price from us and help keep the club alive.

See me on meeting day or phone me at home (02) 639 5847 and I will contact our supplier and let you know the price.



Diagnosing Problems with Serial and Parallel Ports

To diagnose problems with serial and parallel ports, you need diagnostics software and a wrap plug for each type of port. The diagnostics software works with the wrap plugs to send signals through the port. The plug wraps around the port so that the same port receives the information it sent. This information is verified to ensure that the port works properly. For further information, see Chapter 14, "Hardware Troubleshooting Guide."

Many problems stem from using the wrong serial port card in a system. Most clone manufacturers are guilty of this practice in AT systems because the right card is more expensive. The big difference in serial ports is in the Universal Asynchronous Receiver Transmitter (UART) chip. UARTs are the primary port circuits. Several different versions exist, and they have different applications. Some of the UARTs should be used only in certain systems because the system ROM BIOS is designed specifically to support certain chips. OS/2, which replaces the ROM BIOS when it runs, also is designed for a specific UART. Using a port with the wrong UART results in problems such as the port hanging, incompatibilities with software, lost characters, or total functional failure.

Most UART chips used by IBM are made by National Semiconductor. Identify the chips by looking for the largest chip on the serial port card and reading the numbers on that chip. Usually the chips are socketed, and replacing only the chip may be possible. Table 10.15 lists UART chips in PC or AT systems.



The interrupt bug referred to in table 10.15 is a spurious interrupt generated by the 8250 at the end of an access. The ROM BIOS code in the PC and XT has been written to work around this bug. If a chip without the bug is installed, random lockups may occur. The 16450 or 16550(A) chips do not have the interrupt bug, and the AT ROM BIOS was written without any of the bug workarounds in PC or XT systems.

Various manufacturers make versions of the 16550A; National Semiconductor was the first. Its full part number for the 40-pin DIP is NS16550AN or NS16550AFN. Make sure that the part you get is the 16550A, and not the older 16550. You can contact any of the following distributors for the NS16550AN:

Fry's Electronics
Sunnyvale, CA 94088
(408) 733-1770

Jameco Electronics
1355 Shoreway Road
Belmont, CA 94002
(415) 592-8097

JDR Microdevices
2233 Branham Lane
San Jose, CA 95124
(800) 538-5000 and (408) 995-5430

MicroProcessors Unlimited
24000 S. Peoria Ave.
Beggs, OK 74421
(918) 267-4961

Some computers (particularly 4.77 MHz, 8088 machines) are not fast enough to support the higher communications speeds, especially 19200 or 38400 bps. Even if you have a faster system, if you are running a program that makes heavy use of extended memory, such as a RAM disk or a cache, you may lose characters. This problem occurs primarily on 286 machines. With some programs, like VDisk, it helps to reduce the sector size or the number of sectors transferred at a time (transfer block size) helps.

Some terminate-and-stay-resident (TSR) programs interfere with communications programs. If you are having trouble with a communications program, try to reboot with no CONFIG.SYS or AUTOEXEC.BAT file, to eliminate the TSR programs. Then you can retest the system.

Detecting Serial and Parallel Ports with DEBUG

If you cannot tell which ports (parallel and serial) the computer is using, check for the I/O ports by using DEBUG.

Follow these steps to use DEBUG:

1. Run DEBUG.
2. At the DEBUG prompt, type `D 40:0` and press Enter. This step displays the hexadecimal values of the active I/O port addresses, first serial and then parallel. Figure 10.13 shows a sample address.

```
0040:0000  F8 03 00 00 00 00 00 00 BC 03 00 00 00 00 00 00
             ↓   ↓   ↓   ↓   ↓   ↓   ↓   ↓
             COM1 COM2 COM3 COM4 LPT1 LPT2 LPT3
```

The address for each port is shown in the corresponding position. Because addresses are stored as words, the byte values are swapped and should be read backward. This example indicates one serial port installed at 03F8 and one parallel port installed at 03BC.

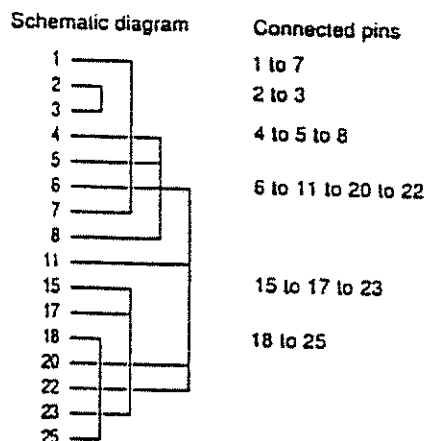
3. To exit DEBUG, press Q and press Enter.

Chip	Description
8250	IBM used this original chip in the PC serial port card. The chip has several bugs, none of which is serious. The PC and XT ROM BIOS are written to anticipate at least one of the bugs. This chip was replaced by the 8250B.
8250A	Do not use the second version of the 8250 in any system. This upgraded chip fixes several bugs in the 8250, including one in the interrupt enable register, but because the PC and XT ROM BIOS expect the bug, this chip does not work properly with those systems. The 8250A should work in an AT system that does not expect the bug, but does not work adequately at 9600 bps.
8250B	The last version of the 8250 fixes bugs from the previous two versions. The interrupt enable bug in the original 8250, expected by the PC and XT ROM BIOS software, has been put back into this chip, making the 8250B the most desirable chip for any non-AT serial port application. The 8250B chip may work in an AT under DOS, but does not run properly at 9600 bps.

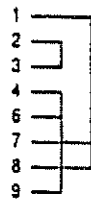
- 16450** IBM selected the higher-speed version of the 8250 for the AT. Because this chip has fixed the interrupt enable bug mentioned earlier, the 16450 does not operate properly in many PC or XT systems, because they expect this bug to be present. OS/2 requires this chip as a minimum, or the serial ports will not function properly. It also adds a scratch-pad register as the highest register. The 16450 is used primarily in AT systems because of its increase in throughput over the 8250B.
- 16550** This newer UART improves on the 16450. This chip cannot be used in a FIFO (first in, first out) buffering mode because of problems with the design, but it does enable a programmer to use multiple DMA channels and thus increase throughput on an AT or higher class computer system. I highly recommend replacing the 16550 UART with the 16550A.
- 16550A** This chip is a faster 16450 with a built-in 16-character Transmit and Receive FIFO (first in, first out) buffer that works. It also allows multiple DMA channel access. You should install this chip in your AT system serial port cards if you do any serious communications at 9600 bps or higher. If your communications program makes use of the FIFO, which most will today, it can greatly increase communications speed and eliminate lost characters and data at the higher speeds.

Wrap Plug (Loopback) Wiring

Many third-party diagnostics packages do not have correctly wired wrap plugs. These plugs may pass their own tests, but fail tests by other diagnostics, especially IBM's Advanced Diagnostics. Figures A.10 through A.12 show the wiring of IBM's tri-connector wrap plug P/N 72X8546. These plugs pass IBM's Advanced Diagnostics as well as virtually all compatible diagnostics software tests that check serial and parallel ports.

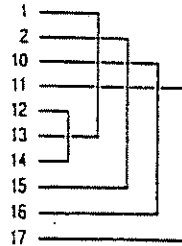


Schematic diagram Connected pins



1 to 7 to 8
2 to 3
4 to 6 to 9

Schematic diagram



Connected pins

1 to 13
2 to 15
10 to 16
11 to 17
12 to 14

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 I have installed Microsoft office, now some things seem so different from just having Word 6.0,,One problem I'm having is scrolling down the page of text using the arrows buttons. if I keep the mouse button clicked on the scroll arrow for too long. the page's just keep on scrolling to the end of the text, moving the mouse or releasing the mouse button doesn't help, the mouse's arrow stays stuck on scroll button until it stops scrolling*

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

CANNON BJC-4000

REVIEW

By Gary W. Cox

In looking for a color printer for both my TI99/4a and LPC to share I reviewed many different brands and models. Without actually having each model on hand to do comparative testing for this review it is hard to make a complete comparison so in this review I will focus just on the Cannon BJC-4000 itself

INTERFACE AND COMPATIBILITY

The Cannon BJC- 4000 comes with a parallel interface which I have tested to operate with both the TI99/4a and IBM compatibles. By swapping cables I can have it connected to either my 4a or PC. The printer will emulate a Epson LQ-2550 or IBM Proprinter 24E so any program which will operate with these two type printers should work fine with the BJC- 4000. As far as graphics with the TI99/4a I have not tested the printer. However the BJC-4000 has been tested to work ok with TI Writer and if fact. the text of our newsletter is printed on a Cannon BJC-4000 from a TI99/4a! However. in order to access the color capabilities of the printer whatever program you use must know how to send the codes to print in color thus programs on the TI99/4a will not print in color unless they are re-programmed to do so.

Instead of a ribbon this type printer uses ink contained within a replaceable cartridge. This ink is what is used to produce output on paper. The paper can be 8.5 by 11 letter size. 8.5, by 14 legal, A4, #10 envelopes or European DL, envelopes. The paper type can be plain paper (like copier paper), coated paper, glossy paper and transparency... Up to 100 sheets of plain paper can be inserted into the sheet feeder.

INK CARTRIDGES

The printer comes with two interchangeable ink cartridges. One cartridge contains only black ink and is used when Only black output is desired. Thus the black ink is not used up in the color cartridge... Furthermore. this black only cartridge contains about 3 times the amount of black ink as does the color cartridge. With the black only cartridge inserted the printer can print faster as well at 496 characters per second (CPS) in draft mode and 346 cps in high quality mode. When color output is desired the user must remove the black cartridge and insert the color cartridge. This switching can be done in a matter seconds as it is very easy to do. The color cartridge itself is actually two cartridges in one. The color cartridge has two removable ink wells, one ink well contains the basic colors of RED, GREEN and BLUE whereas the other ink well contains black only. The advantage of having separate ink wells is that if all the black is used up only the black ink well must be replaced. Thus if one of the colors is used up only the color ink well. need be replaced leaving the black ink well untouched. However, if just red is used up and green and blue still has ink the entire color ink well still must be

replaced. Furthermore, by having a separate black ink well a true black is obtained rather than combining several colors to produce black. These ink wells are also easy to change.

With the color cartridge in place print speed in black only is 248 CPS in draft mode and 173 CPS in high quality mode. Speed of color printing varies depending on the complexity of the colors but basically most color print jobs will take several minutes. Color print speed ranges from 0.3 to 0.8 pages per minute. Print resolutions are up to 720 DPI (dots per inch) in black only print and 360 DPI in color print.

The printer itself is very quiet and requires little maintenance since the print head is actually the ink cartridges so when a ink cartridge is replaced the print head is also being replaced!

THE OUTPUT

The output in black is excellent and I have found it almost impossible to tell the difference between this print and a Hewlett Packard Laser III printer (300 DPI). Looking very very close I can barley pick out the difference between the Cannon BJC-4000 and a Hewlett Packard Laserjet 4 (600 DPI) printer. In short I am amazed at the quality of the print in black! The print quality in color in comparison to the print quality of the black is noticeably different in that the color print is not quite as sharp as the black print but the print still looks great! To obtain better quality color print would require a much more expensive printer.

FOOTPRINT

The design of the printer the printer physically takes up a small amount of space as far as the foot print goes as opposed to other printers which take up a larger area.

DOCUMENTATION

The printer comes with a 192 page manual explaining it's operation but it does not explain any of the escape codes necessary to program your Software to send the necessary codes for color printing if your software does not recognize a Cannon BJC-4000 printer. On PC systems most programs should have a selection for a Cannon BJC-4000 printer or something close to it thus no escape code programming is necessary. However, for the TI99/4a it will be necessary to obtain these escape codes from Cannon in order to program software to print in color... These escape codes appear to be available free of charge from Cannon.

REPORT CARD:

PRICE	\$350 (+ OR - \$\$\$)
QUALITY	A+
VALUE	A
EASE OF USE	A-
DOCUMENTATION	B+
WARRANTY	2 YEARS

FINAL GRADE A.

END OF ARTICLE 

REGIONAL GROUP REPORTS

Meeting Summary For **APRIL**

Central Coast	13/04/96	Saratoga
Glebe	11/04/96	Glebe
Hunter Valley	14/04	21/04/96
Illawarra	09/04/96	Keiraville
Liverpool	12/04/96	Yagoona West
Sutherland	19/04/96	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 135B Arundel 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 9.30 PM or at work (02)708 1987

Liquorland YAGOONA for more information.

*** ALL WELCOME ***

12 th APRIL 1996
10 th MAY 1996
7 th JUNE 1996
12th JULY 1996
9th AUGUST 1996
13th SEPTEMBER 1996

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.

APRIL MEETING - 6th APRIL

MAY MEETING - 4th MAY

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

13th APRIL FOR THE MAY MEETING

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.