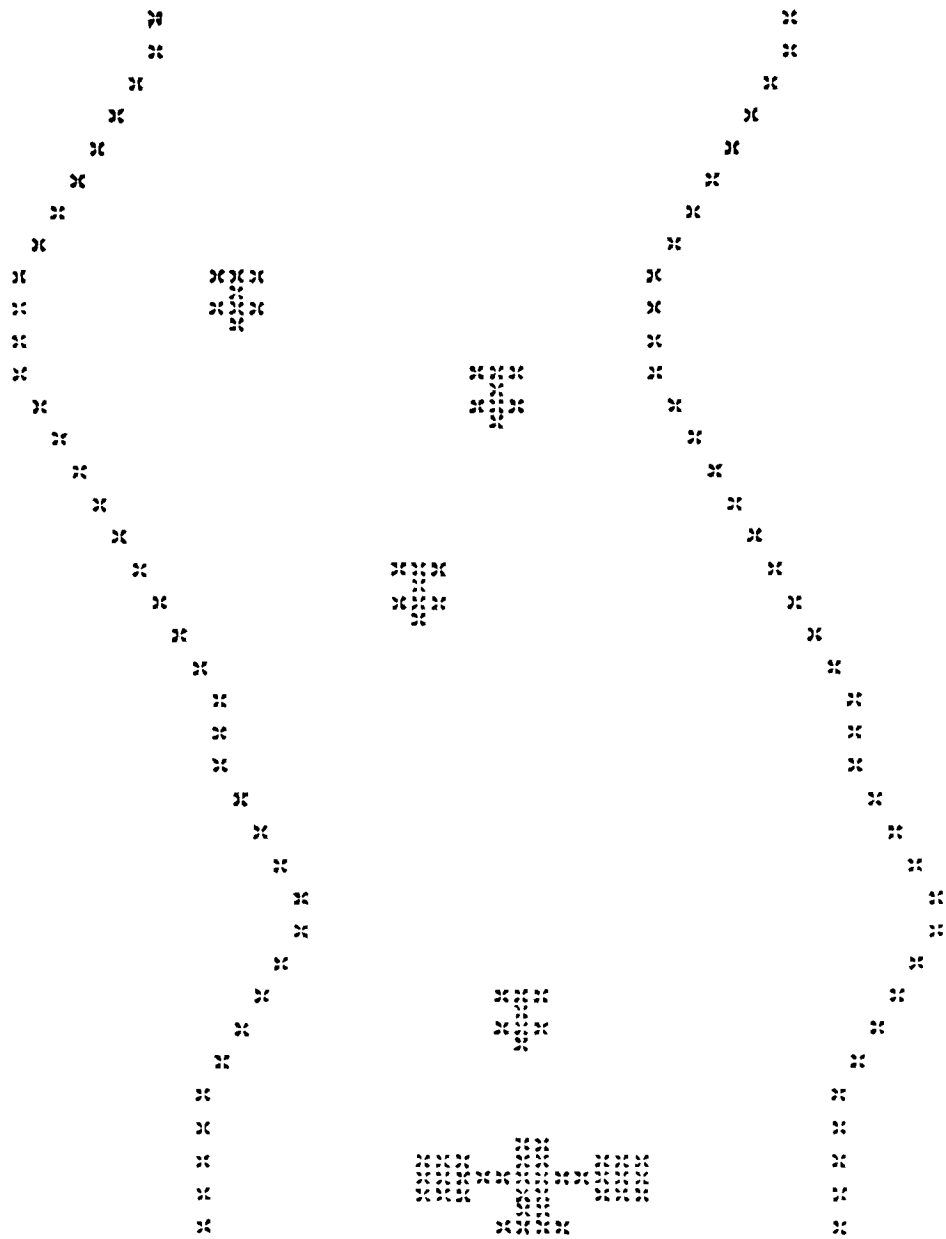


DREAMER 19



INDY 6800

D R E A M E R

Here it is at last, issue number 19. Due to the late release of Dreamer number 18, we have decided to start from Dreamer number 19. I am sorry it is late, but as I indicated in the introductory letter, I had to wait until there was enough material to publish.

Response to my notice in Dreamer 17 has been quite good, but not as good as I had hoped. The Dreamer needs as many people as possible in order to keep it going because by having more subscribers, there is obviously a greater amount of material to publish sent in. Also, by having more subscribers, we can cut the cost of a subscription. So if you know of any ex-Dreamers who haven't yet sent in to us, prompt them into action and you will do everyone a favour. Remember, if you have anything of interest about the Dream, send it in because we all want to know about it!

I have received a letter from Lyndsay Ford of 'Dreamcards' and he tells me that all future software that he is writing for the Dream will be available in EPROM only, because of losses due to piracy of tape versions. He says however, that all his original programs (see insert in last Dreamer) will continue to be available on tape. 'Galactica' is now available from Dreamcards and I have received my copy from Lyndsay. It is easily the most exciting game ever written for the Dream, see the review in this issue.

Frank Rees has written to me and has said that he will be a regular contributor to the Dreamer and that he will be starting a section called "PROGRAM TECHNIQUES". This will be very interesting and hopefully it will encourage more of us to write programs.

On a different note, Phil Marston tells me that he is a collector of stamps, so if you have any interesting stamps that you don't want, please put them in an envelope next time you write to me. He says he will cover the cost of any additional postage.

I can't tell you much of what I have in store for next month because as yet I don't have many contributions to tell you about, but we will have these features.

- * The first in a series of inserts: A tape catalog sheet.
- * A display and shift data program, which displays data from memory and automatically scrolls the screen.
- * More from Frank Rees.

This is not enough for one issue, so please get writing.

So until next month, keep Dreaming!

ASHLEY & ANDREW

PRICE STRUCTURE

Some people have been asking how much a subscription costs. It is as follows:

\$3.50 for a single issue.

\$18.00 for six issues.

These prices include postage anywhere in Australia.

** ADVERTISEMENTS **

DO YOU NEED HELP?

If so send a S.S.A.E. to me with specific question and when the answer is found the reply shall be sent. The interesting ones will be printed in the Dreamer.

FRANK REES,
[REDACTED]
[REDACTED]

- 0000000000 -

HELP US HELP YOU

Would any Dreamer like to make up a list of all corrections to previous Dreamer articles?

- 0000000000 -

Do you know where I may be able to buy Siemens Model 100 Teleprinter?

FRANK REES,
[REDACTED]
[REDACTED]

■ 0000000000 -

*** CHIP-8 & GAMES ***

DEATH TRAP

(0200 - 0300)

MARK LIPMAN

This is a similar game to "Barrier" which appeared in the first Dreamer. The object of the game is to obtain the maximum length in your "snake" of dots. Your task is made more difficult by randomly placed dots which continually appear on the screen throughout the game. You can steer yourself about using keys 8 (left), 5 (up), A (right), D (down). Remember, colliding with either one of the dots, yourself or the border is fatal. At the start of the game the screen blanks out and you select the speed (0-E:0 slowest, E fastest), F causes you to increase your speed as the game progresses. At the end of a game your score is displayed as how many dots long your snake is. Any key restarts the game.

If you wish to change the keys for direction enter the desired change at LOC. 02D1 (LEFT), 0245 (RIGHT), 0239 (UP), 023E (DOWN).

```

0200  00E0 FCOA 6D00 4COF  6D01 4COF 6C00 00E0
0210  6300 6400 6B00 22B0  6B1F 22B0 6A00 22C0
0220  6A3F 22C0 CA1F 7A08  CB0F 7B08 C503 A2AC
0230  0000 22D0 E6A1 6500  6605 E6A1 6501 660D
0240  E6A1 6507 660A E6A1  6503 4500 7AFF 4501
0250  7BFF 4502 7B01 4503  7A01 6F00 DAB1 3F01
0260  1288 00E0 6A18 6B0F  FA18 A2AD F433 F265
0270  F029 DAB5 7A04 F129  DAB5 7A04 F229 DAB5
0280  7A04 F329 DAB5 1202  7301 430A 7401 3D01
0290  129A 430A 7C01 4C10  6C0F 430A 6300 6E14
02A0  8EC5 FE15 FE07 3E00  12A4 1232 8000 0800
02B0  6A00 A2BE DAB1 7A08  3A40 12B4 00EE FF80
02C0  6B01 A2BF DAB1 7B01  3B1F 12C4 00EE 0000
02D0  6608 C03D C11D 7001  7101 D011 00EE 0000

```

- 0000000000 -

BRICKWALL BLITZ

(0080 - 0400) or (0080 - 0434)

L. M. FLOOD,

The Earth is being bombarded by bricks from outer space, the last remnants of civilization are about to be overrun by the growing wall. Your task is to prevent the wall from reaching your base's position for as long as possible.

The only way that a part of the wall can be destroyed is by moving your base under a falling brick, thus catching it, and then dropping it on the wall. Bricks which are caught do not have to be

dropped immediately, so a stockpile of ammunition can be built up.

Keys 4 and 6 move the base left and right, while key F fires the captured bricks. Key functions are determined by the instructions at 0216 and 021E.

Note that bricks are not affected by gravity and parts of the wall may float in mid air. Also a captured brick which hits a falling brick will be changed into stationary wall at the point of impact and the falling brick will continue to plummet downwards.

It only takes one small section of the wall to build up to the height of the base to end the game, the time you survived will then be displayed in minutes and seconds.

For a more difficult game change 00EA to 702020 or 702000. Those with more than 1K should change 00AC to 1400 and key in the high score routine from 0400 to 0434.

0080	7A00	207A	0021	7D80	127C	00FD	8632	91FD
0090	2612	7F00	FD7C	00FC	863C	91FC	2606	7F00
00A0	FC7C	00FB	3B00	00E0	A0F9	F365	0000	8420
00B0	8530	6A10	6B14	20BE	FOOA	00E0	120A	A0F0
00C0	F43J	20CC	A0F0	F533	20CC	00EE	A0F1	F165
00D0	F029	DAB5	7A05	F129	DAB5	7A07	03E4	03EE
00E0	00EE	0000	8080	00C0	0000	F870	20F8	7020
00F0				SCRATCH	PAD			

0200	03D2	A100	FF65	A0F0	FF55	60FF	62FF	64FF
0210	66FF	A0F0	F655	6504	6606	6800	6900	6A0F
0220	68FF	03D9	6D1E	6E0F	A0ED	DDE3	A3F8	E59E
0230	1236	7DFF	DDE3	E69E	123E	DDE3	7D01	EAA1
0240	225C	6700	A0F0	F71E	2278	4901	10A6	7702
0250	3708	1244	38FF	02B0	03C1	122C	3BFF	1276
0260	4800	1276	02A0	A0E4	DBC2	3F01	1276	7CFE
0270	7BFE	0301	6BFF	00EE	F165	30FF	1282	2286
0280	1284	035D	00EE	C407	3400	129E	C03F	61FF
0290	A0E6	D012	3F01	129C	D012	128C	039C	00EE
02A0	963D	4C4C	847F	973B	8612	973C	7A00	J839
02B0	CE00	E4C6	018D	3ECE	00E2	C603	7F00	3F8D
02C0	347D	003F	260F	861D	913C	2628	CE00	E3C6
02D0	038D	2220	1BCE	03FD	C602	7A00	3B7A	003B
02E0	8D13	BD03	013E	3F01	01CE	03FB	C602	8D05
02F0	5F5A	D73B	3996	3B97	2E96	3C97	2F8D	C226

0300	39BD	03EE	C620	D03C	C105	2302	C605	963B
0310	972E	963C	972F	CE00	E886	0197	1C37	DF14
0320	A600	971E	7F00	1FD6	2EC4	0727	0974	001E
0330	7600	1F5A	26F5	D62E	BDC2	7596	1E8D	16D6
0340	2ECB	08BD	C275	961F	8DOB	7C00	2FDE	1408
0350	335A	26C9	3916	CAFF	E400	E700	39CE	00E6
0360	8D4E	7D00	3F26	DDCE	00E7	8D44	861E	9131
0370	263D	2021	CE00	E68D	3786	1191	3126	037C

```

0380 0039 860E 9131 260D CE00 E78D 237C 0038
0390 BD03 EE20 03BD 03E4 C6FF D730 7F00 FE86
03A0 F09B 3797 FFDE FE96 30A7 0096 31A7 0139
03B0 9630 972E 9631 972F 7F00 3FC6 02B0 C226
03C0 39CE 0030 6CC1 6CC3 6CC5 6CC7 6C0C 0101
03D0 0139 3ECE 0080 DF00 397F 00FD 7F00 FC7F
03E0 00FB 3901 8603 9721 C640 BDC2 E539 8604
03F0 9721 C641 BDC2 E539 8448 3088 5088 7000

```

FOR SYSTEMS WITH MORE THAN .1K CHANGE 00AC TO 1400

```

0400 8400 8510 8025 3F01 1414 3000 1420 8135
0410 3F00 1420 8020 8130 A0F9 F155 8420 8530
0420 A42E 6A08 6B07 DAB5 6A10 208E 10AE A8AA
0430 E8AA A800 **

```

- 0000000000 -

INDY 6800

(0200 - 0400)
S. DIXON,

This is a neat little programme containing two car race games. When the programme is run, your car appears at the bottom of the screen and you type: A for a straight road with oncoming cars to avoid, or B for a winding road. Your car starts in motion and keys 4 and 6 steer you left and right, and key E accelerates and C brakes. Note that the brake key only slows you down to your initial speed and thus can only be used after having accelerated. When you crash the game ends and your score is displayed, and if it is the highest in the current game series, "HIGH SCORE" is displayed. Any key restarts the programme and then game A or B is selected as usual.

```

0200 13A8 13B0 A284 DAB4 F80A 6C04 ECA1 1288
0210 6C06 ECA1 1288 6C0C ECA1 129C 6C0E ECA1
0220 12A4 380A 12D0 6526 A2C4 D431 D531 77FF
0230 3700 124A CC01 6701 3C00 124A 13BA 670A
0240 C907 8944 7902 A284 D934 A284 DAB4 0288
0250 6F00 DAB4 3F01 1306 00E0 0384 4F00 2316
0260 6A18 6B10 A0FC FD33 F265 F029 DAB5 7A05
0270 F129 DAB5 7A05 F229 DAB5 2376 6032 F018
0280 00E0 1202 40E0 40E0 A284 DAB4 3C04 7A02
0290 7AFF 6F00 DAB4 3F01 1222 1258 72FF 4200
02A0 6201 1222 7201 4204 6203 1222 0000 0101
02B0 1801 0001 0000 201C 0400 0086 0197 80C6
02C0 F7D7 81DE 80A6 00A7 085A C1FF 26F3 3900
02D0 6301 3600 12DC C903 C607 7601 4900 74FF
02E0 4901 7401 4902 12D6 34FF 12F0 6401 6901
02F0 3432 12F8 6430 6900 76FF A2C4 D431 8540

```

```

0300 750D D531 124A 7101 5120 124A 6100 8E24
0310 0351 3FFA 120A 6A00 6801 A338 DAB5 7A08
0320 A33D DAB5 7A0C A342 DAB5 7A08 A347 DAB5
0330 7A08 A34C DAB5 00EE AEA4 E4A4 AEFA 8A8E
0340 AAEA EE88 E828 EEEE AAAE ACEA EAHA EA80
0350 EA96 3ED6 8280 0A2B 0997 3E5C C10A 2703
0360 D782 397F 0082 7C00 3D96 3D81 FA27 0139
0370 BDC0 7997 3F39 A082 F065 F029 7A05 DAB5
0380 FFOA 00EE D63D 4690 1127 0E10 2B01 397F
0390 003F D790 9682 9791 3996 91D6 8210 4D2B
03A0 0139 D791 7F00 3F39 A100 F165 A090 F155
03B0 A2AC FE65 A082 F055 1204 4201 123E 6706
03C0 1240 **

```

- 0000000000 -

SHIELDS FOR DREAM INVADERS

(0700 - 0750)
ASHLEY EMERY,

This short addition to Dream Invaders adds five shields to give a little extra protection from the invaders. Each bomb that the invaders drop onto a shield wipes one block from the shield. Your missiles do the same. The shields are renewed at the start of each round and after your cannon has been hit.

Key in this programme at 0700 as well as keying in the changes to the main programme and then run, as usual, from 0200.

Changes to the Main Programme:

```

Change data at 022A to BD071D
                0415 to 7E0734
                0500 to 7E0724
                0526 to BD071D

```

Extra Programme:

```

0700 8600 972E 3686 1897 2FCE 0719 C604 BDC2
0710 2632 8B0E 8146 26EA 39FE FE82 00BD 0700
0720 BD02 CC39 2D03 7E05 0396 A381 182C 0139
0730 BD04 DE39 BD04 2496 A581 182C 0139 BD03
0740 E939 **

```

Note that I found that occasionally a stray invader appears in the bottom row. I could not work out why but I decided to include this programme anyway in the hope that someone may be able to fix this point up. In any case this does not happen very often so it should not present much of a problem.

REVIEW

NAME : GALACTICA
DISTRIBUTED BY : DREAMCARDS
COST : \$25.00

Dreamcards have really done it this time and has come up with the most exciting game ever written for the Dream. If you thought Dream Invaders required skill, wait until you try this one!

Similar to the arcade game 'Scramble', Galactica takes up almost all of 4K, and contains every option for the game built in to the software. The game allows you to select sound effects, joystick and one of three levels of skill at the touch of a key, and on the first run displays brief instructions for the game.

Here is how I found the game. After loading in the program, a short checksum is automatically run, and the game goes no further if an erroneous loading occurred. This never happened for me, however, and I was straight into the action of the game. You have three selections to make before the run of every game as aforementioned: Sound effects, Joystick, Level of skill. Sound effects are excellent, but for those of you without a sound effects generator, simple 'beeps' are provided when sound effects are not selected. I think a word about the joystick is warranted, because of the unexpected way in which it operates.

In skill level one the joystick moves you proportionally around the screen (like 'Sheepdog'), which means you have to be very careful because movement is very sensitive. In levels two and three, the joystick controls thrust i.e. your rate of movement in any direction which requires even more care as you must remember to centre your joystick after each movement. Overall I found that although the joystick allows more rapid movement, it was easier to use the up and down keys with one hand and the drop bomb and fire laser keys with the other. Now doubt the more astute arcade game player will be able to reap the benefits of the joystick.

Levels of skill are excellently varied, with level one being ideal for beginners to level three which will prove a challenge for even the veteran space game player. The general differences between the levels are speed, duration of the game, "nastiness" of the aliens, number of shots allowed with lasers and bombs, and the number of times you can be hit before you are "dead".

One point that I think even Lyndsay should note is that although scoring goes up to 9900, this is impossible to attain, because of the limits placed on the bombs and the lasers, unless you recieve points for reasons other than destroying the aliens. The extraordinary thing is that in level three you are allowed a hundred lasers when you need a lot more and in level one you are given two hundred when you don't need that many. Despite this I can honestly say that in

level three I have never run out of lasers because I am always being shot down.

Now for a rundown on the game itself. The game divides itself into four stages, each harder than the one before. First you have to travel through a meteor storm where there are no points to be earned shooting meteors, just stay out of their way! Next, if you survive the meteors, you fly over the land of Galactica, and success is yours as you blow the hearts out of the Galactan enemies. If you can pilot yourself through this you will realise that things start hotting up because a roof comes over your head, and as if the aliens were not enough to contend with, you now have to avoid hitting the roof or the floor of the cave. Many a time you rush over a mountain only to get zapped by a nasty little death ray. After a short while the roof and the floor move together, and you now have to steer yourself carefully through narrow tunnels, over high mountains, and all the while trying to avoid aliens and debris, which block the tunnel when you least want it. If you are lucky a moment of relief will come and the tunnel will widen out but not for long! If you get blasted by the aliens once to often, or if you are a space ace and escape the caves then the game ends, and your score, the possible score, and the light years you travelled are displayed. Ocassionally the computer will comment on your performance, but I cannot work out on what basis these comments are given. One point that I forgot to mention is that if the doorbell rings just as you are about to get the highest score ever, key 0 stops the game and any other key restarts the game where you left off.

The game comes on cassette complete with a comprehensive set of instructions for the game. To sum up Galactica is an excellent game, packed with adventure and excitement, and well worth buying. So don't get caught without a copy otherwise you are really missing something.

A NOTE ON BEHALF OF DREAMCARDS

Lyndsay went to a lot of work to produce this game, so if you want him to stay in business, don't give copies of his programs to your friends. Remember that it is because of tape pirates that prices of software are high, so be honest and do everyone a favour.

UTILITY PROGRAMS AND SERIOUS APPLICATIONS

DREAM ORGAN

(0200 - 0250)
F. REES,

This program allows the Dream to be used like an organ. Unlike other Dream organs this one is "live" and plays notes as they are pressed without requiring a prestored tune. It covers the range of B, (key 0) to C" (key F). The notes covered can be altered by changing the data in the lookup table (0230-024F). Like other Dream organs, this one requires an amplifier connected to PBI of the PIA. The program is fully relocatable as long as the entire program is stored in the same 'page' of RAM (i.e. the first two digits of each address is the same.)

```

0200 8637          LDAA #37
0202 B78013        STAA 8013
0205 DE06          LDX 06
0207 DF31          STX 31
0209 DF30          STX 30
020B BDC297 KEYIN JSR KEYINP
020E 7D0018        TST 0018
0211 26F8          BNE KEYIN
0213 48            ASLA
0214 D632          LDAB #32
0216 1B            ABA
0217 9731          STAA 31
0219 4F            CLRA
021A B78012        STAA 8012
021D 8D09          BSR DELAY
021F 8602          LDAA #02
0221 B78012        STAA 8012
0224 8D02          BSR DELAY
0226 20E3          BRA KEYIN
0228 DE30 DELAY    LDX 30
022A EE30          LDX 30,X
022C 09 AGAIN      DEX
022D 26FD          BNE AGAIN
022F 39            RTS

```

DATA FOR PITCH OF NOTES

```

0230 02E0 B,
0232 0280 C
0234 0250 D
0236 01F0 E
0238 01C4 F
023A 0180 G
023C 0138 A

```

0240	00E4	C'
0242	0080	D'
0244	0088	E'
0246	0070	F'
0248	004E	G'
024A	0030	A'
024C	0010	B'
024E	0001	C''

- 0000000000 -

DIS-A-6800

(0080 - 0100)
FRANK REES

This program allows you to look at a machine code programme one instruction at a time, not one byte at a time. For example, if 0200 contains "BDC079" then "0200 BDC079" will be displayed and not just "BD". Type in the programme at any convenient location in memory then run from its start address (eg. 0080). Then type in the start address of the area of RAM you want to look at and this address will be displayed followed by the instruction at that address. Any key shows the next instruction and scrolls the screen up. Note that you get funny results when data is come across or if you start halfway through an instruction but the program soon becomes correct again.

0080	BDC3	9097	06BD	C390	9707	8608	BDC3	B3DE
0090	06C6	01A6	0081	8C27	1081	8E27	1981	CE27
00A0	1584	F081	2027	1081	7027	0827	0B81	8027
00B0	0581	F027	015A	5C5C	37BD	C3C8	4FBD	C3DE
00C0	08DF	0637	5A26	F1BD	C2C4	C606	CE01	00A6
00D0	08A7	0008	8C02	0026	F65A	26F0	20AC	**

- 0000000000 -

TELEPHONE DIALLER

(0200 - 0300)

R.G. DAVIS,

This programme along with a simple interface with the telephone line allows you to use the Dream to dial either any number directly or automatically dial one of up to sixteen prestored numbers. This programme was originally designed to aid a disabled person but could naturally be useful for any Dream owner. Run the programme from 0200 and test it by changing 0256 to C2DF and if the programme is correct you will hear tones from the speaker. Change the programme back if all is well and connect your Dream to the telephone line as per the diagram. Type D to dial a prestored number, or E to dial from the keypad. To use the keypad just type in the desired telephone number followed by F when the number is finished. Note that A is used for 0. To use a prestored number do the following:

1. At loc. 02F0 type in the addresses of where you want to store the numbers. Eg. 0080, 0088, 0090 will allow three local numbers to be stored at those locations which can be dialled by typing 0,1, and 2 respectively.

2. Type in the numbers at the addresses you have chosen and finish it up with OF. Eg. 747 1702 would be stored as:

0080 07 04 07 01 07 0A 02 OF

3. Type D followed by the code for that number (0-F), taking into account that the first address referred to at 02F0 is code 0, the second 1, and so on.

Remember that all numbers must be terminated with an F and that A is used for 0. Also note that using the Dream in this fashion does not strictly comply with Telecom regulations but I will leave that up to the discession of the Dreamer.

0200	BD02	DCBD	C2C4	810E	2706	810D	2707	20F0
0210	BD02	3720	EABD	02AE	20E6	0101	018D	C193
0220	C605	BDC2	2496	2F80	0597	2F96	2E8B	0497
0230	2E96	177C	0240	3986	30B7	0240	BDC2	C497
0240	30B1	0F27	048D	D620	F386	30B7	026B	B702
0250	7486	0097	10BD	0229	C600	BD02	82BD	029D
0260	C601	BD02	827C	0010	9610	9130	26E7	7C02
0270	7486	0F91	3027	OAC6	02BD	0282	7C02	6B20
0280	D039	CE02	E308	085A	2AFB	EE00	C601	D720
0290	7D00	2026	F809	26F4	3986	0220	0786	FDB4
02A0	8012	2003	BA80	12B7	8012	39BD	02DC	BDC2
02B0	C4CE	02EE	0808	4A2A	FREE	00FF	02C8	CE00
02C0	3020	047C	02C9	08B6	0101	A700	810F	2709
02D0	DF10	BD02	10DE	1020	EA7E	0249	8600	972E
02E0	972F	7ECO	7900	0200	0300	19**	****	****
02F0	ADDRESSES OF PHONE NUMBERS STORED HERE.							

- 0000000000 -

How to Interface the DREAM to the Telephone Line.

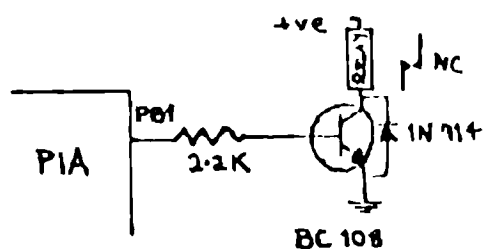


Fig 1.

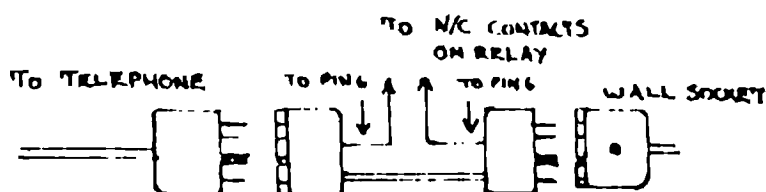
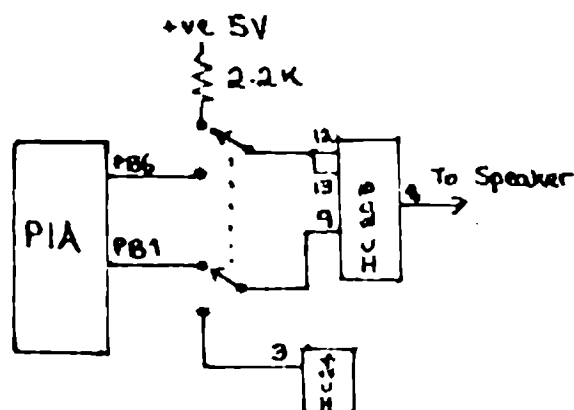


Fig 2

HOW TO USE DREAM AS AN ORGAN WITHOUT AN-EXTERNAL AMPLIFIER.

Ashley Emery

This simple modification to the Dream allows the Dream organ programs to operate on the Dream without the use of an external amplifier. In normal use, switching the switch to "ORGAN" will mute the speaker to shut off those annoying "beeps". Note that this modification does not allow the use of PB1 and 1200/2400 Hz at the same time; the former being available in the "ORGAN" mode and the latter in the "NORMAL" mode.



ORGAN
NORMAL

SWITCH POSITIONS

Just wire in the DPDT switch according to the diagram above.

We apologise once again for the lateness of this newsletter but we had to wait quite a while for sufficient material to publish, and we also had printing problems at the last moment which also contributed to the Dreamer's lateness. We will make every effort in future to get the newsletter out on time but a lot depends on you, so please continue to send us new materials.

ASHLEY EMERY