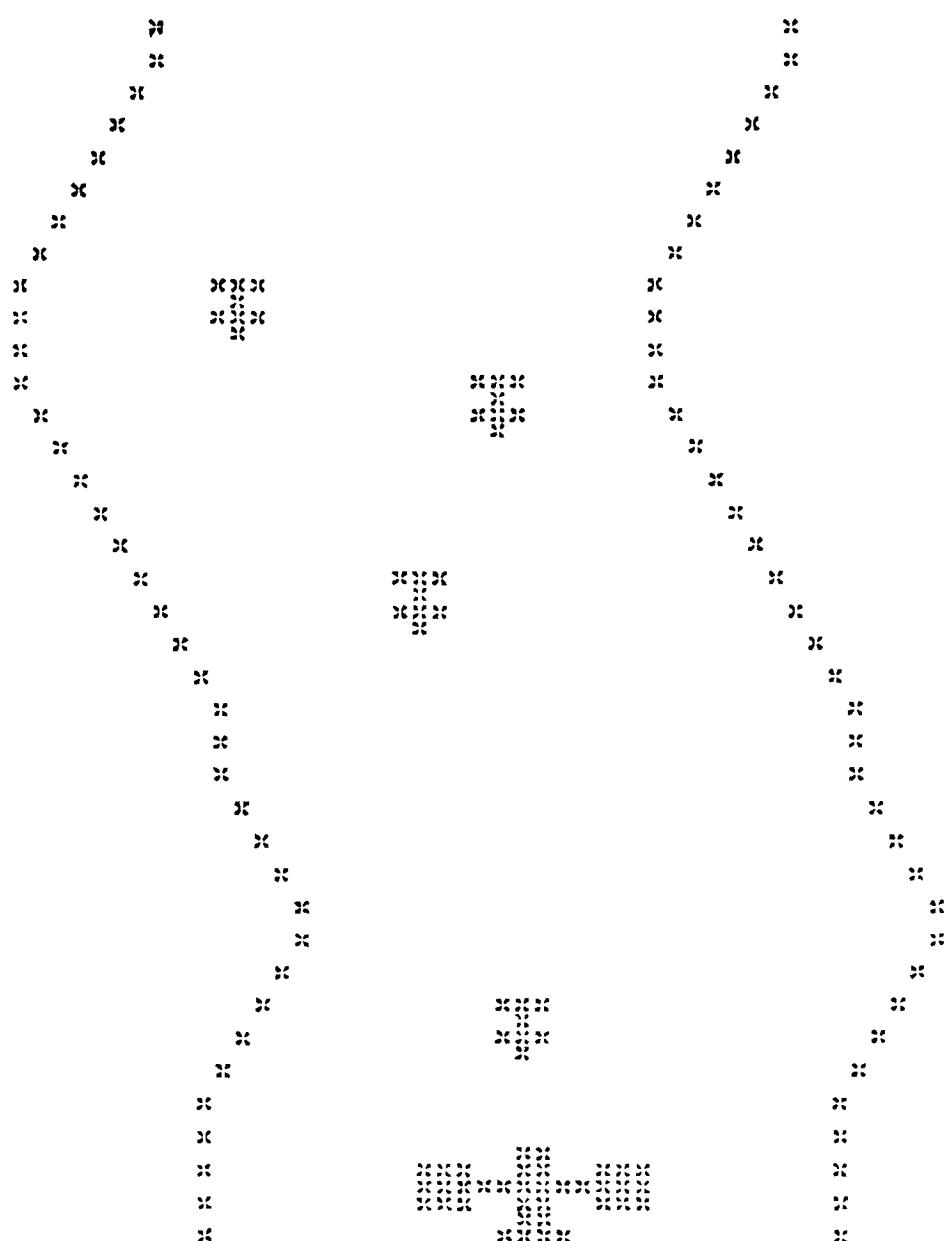


DREAMER 19



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]

- 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 4C0F	6D01 4C0F 6C00 00E0
0210	6300 6400 6B00 22B0	6B1F 22B0 6A00 22C0
0220	6A3F 22C0 CA1F 7A08	CBOF 7B08 C503 A2AC
0230	0000 22D0 E6A1 6500	6605 E6A1 6501 660D
0240	E6A1 6502 660A E6A1	6503 4500 7AFF 4501
0250	7BFF 4502 7B01 4503	7A01 6FO0 DAB1 3F01
0260	1288 00E0 6A18 6H0F	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	8ECS 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	00EO	A0F9	F365	0000	8420
00B0	8530	6A10	6B14	20BE	FOOA	00EO	120A	A0F0
00C0	F433	20CC	AUFO	F533	20CC	00EE	A0F1	F165
00D0	F029	DAB5	7A05	F129	DAB5	7A07	03E4	03EE
00E0	00EE	0000	8080	00CO	0000	F870	20F8	7020
00F0	SCRATCH PAD							
0200	03D2	A100	FF65	A0F0	FF55	60FF	62FF	64FF
0210	66FF	A0FO	F655	6504	6606	6800	6900	6A0F
0220	68FF	03D9	6D1E	6E0P	A0E0	DDE3	A3F8	E59E
0230	1236	7DFF	DDE3	E69E	123E	DDE3	7D01	EAA1
0240	225C	6700	A0FO	F71E	2278	4901	10A6	7702
0250	3708	1244	3BFF	02B0	03C1	122C	3BFF	1276
0260	4800	1276	02AO	AOE4	DBC2	3P01	1276	7CFE
0270	78FE	0301	6BFF	00EE	F165	3OFF	1282	2286
0280	1284	035D	00EE	C407	3400	129E	C03F	61FF
0290	AOE6	D012	3F01	129C	D012	128C	039C	00EE
02A0	963D	4C4C	847F	973B	8612	973C	7A00	1839
02B0	CE00	E4C6	018D	3ECE	00E2	C603	7FO0	3F8D
02C0	347D	003F	260F	861D	913C	2628	CEO0	E3C6
02D0	038D	2220	1BCE	03FD	C602	7A00	3B7A	003B
02E0	8D13	BDO3	013E	3E01	01CE	03FB	C602	8005
02F0	5F5A	D73B	3996	3B97	2E96	3C97	2FBD	C226
0300	39BD	03EE	C620	D03C	C105	2302	C605	963B
0310	972E	963C	972F	CEO0	E886	0197	1C37	DF14
0320	A600	971E	7FO0	1FD6	2EC4	0727	0974	001E
0330	7600	1F7A	26F5	D62E	BDC2	7596	1E8D	16D6
0340	2ECB	08BD	C275	961F	8D0B	7C00	2FDE	140H
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	CED0	E78D	237C	0038
0390	B0D3	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	1380	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	02BB
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	6400	76FF	A2C4	D431	8540

0300	750D	D531	124A	7101	5120	124A	6100	8E24
0310	0351	3FFA	120A	6A00	6801	A33B	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	AAA8	ACEA	EA8A	EA80
0350	EA96	3ED6	8280	0A28	0997	3E5C	C10A	2703
0360	D782	397F	0082	7C00	3D96	3D81	FA27	0139
0370	BDC0	7991	3F39	A082	F065	F029	7A05	DAB5
0380	FPOA	00EE	D61D	4690	1127	0E10	2B0L	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	L23E	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	880E	B146	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. No 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 receive 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,
[REDACTED]

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 PB1 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	02B0	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''

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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 1D81 8E27 1981 CE27
00A0 1584 F081 2027 1081 7027 0821 0881 B027
00B0 0581 F027 015A 5C5C 37BD C3C8 4FBD C3DE
00C0 08DF 0633 5A26 F1BD C2C4 C606 CE01 00A6
00D0 08A7 0008 8C02 0026 F65A 26F0 20AC **

- 0000000000 -

TELEPHONE DIALLER

(0200 - 0300)
R.C. DAVIS,
[REDACTED]
[REDACTED]

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 disreession of the Dreamer.

0200	B002 DCBD C2C4 810E	2706 810D 2707 20F0
0210	B002 3720 EABD 02AE	20E6 0101 01BD C193
0220	C605 BDC2 2496 2F80	0597 2F96 2E8B 0497
0230	2E96 177C 0240 3986	30B7 0240 BDC2 C497
0240	3081 0F27 048D D620	F386 30B7 026B B702
0250	7486 0097 10BD 0229	C600 B002 82BD 029D
0260	C601 B002 827C 0010	9610 9130 26E7 7C02
0270	7486 0F91 3027 0AC6	02BD 0282 7C02 6B20
0280	D039 CE02 E308 085A	2AFB EEO0 C601 D720
0290	7D00 2026 FB09 26F4	3986 0220 0786 FDB4
02A0	8012 2003 BA80 12B7	8012 39BD 02DC BDC2
02B0	C4CE 02EF 0808 4A2A	FREE 0OFF 02C8 CE00
02C0	3020 047C 02C9 08H6	0101 A700 810F 2709
02D0	DF10 BD02 1DDE 1020	EA7E 0249 8600 972E
02E0	972F 7EC0 7900 0200	0300 19** **** ***
02F0	ADDRESSES OF PHONE NUMBERS STORED HERE.	

- 0000000000 -

How to Interface the DREAM to the Telephone Line.

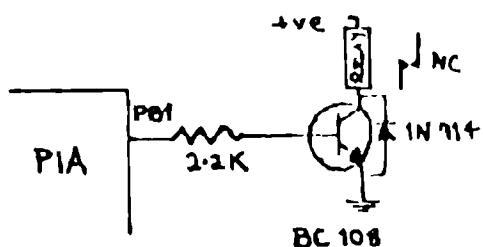


Fig. 1.

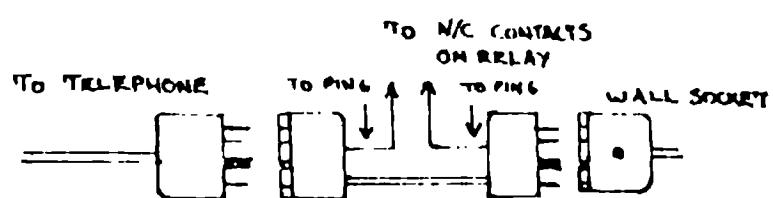
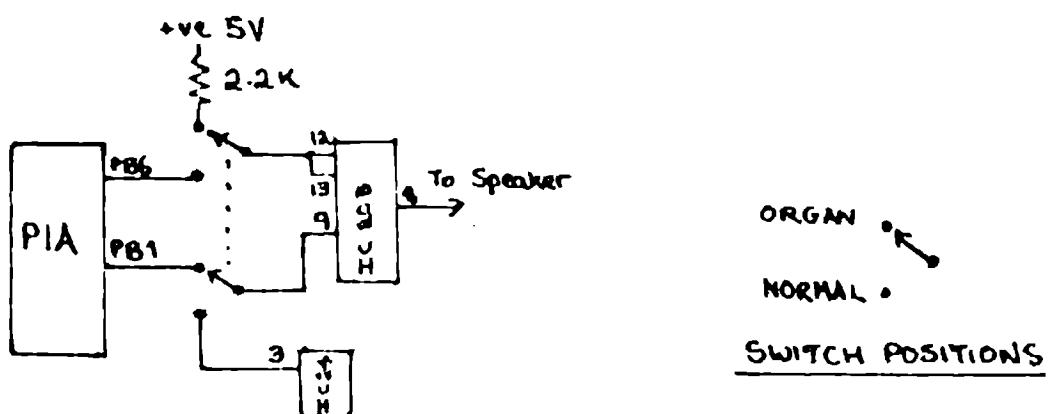


Fig 1

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.



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