SUPER LINE UP

Hi folks and welcome to the second posting of my simulations of some of the greatest fruit machines produced by Barcrest in the 1980s. This one, Super Line Up, is probably the most iconic and fondly remembered of its time.

On loading, press any key to trigger the initialisation once the border goes black.

After initialisation is complete and the attract mode commences, press 'A' to see 25 credits (£2.50) played by the autoplayer. Any other key gives 25 credits to you.

The aim is to end each turn with three matching symbols on the middle line of the reels (the winline). This will result in the following wins:

- £3 Bars
- £2 Bells
- £1.50 Grapes
- £1 Pound Signs (!)
- 70p Plums
- 50p Oranges or Lemons
- 30p Cherries or Stars*

Two of the same symbols on the first two reels give 20p. A 10p sign on the middle reel gives 10p!

Some of the symbols have numbers in the lower right corner. Each turn, after the reels have stopped spinning, the machine adds the sum of those numbers on the winline to the current number illuminated on the matrix on the left of the screen. If the result corresponds to a square offering nudges, the matrix will be advanced and the player given the nudges immediately, irrespective of the symbols on the reels.

If the sum of the numbers does not lead to nudges, the machine will consider which matrix square will result from the numbers on the reels and advance anyway *unless* there is a cash win from the symbols *and* it is *greater*.

10p and wins of £2 and above pay out immediately. Other wins will offer the chance to gamble or to exchange for nudges. On gambling, the reels will respin either to the next highest win or to the lower win flashing when the gamble was taken. A loss will pay out immediately; a win will allow a further gamble until you hit £2 (or lose!).

^{*} The Stars work whenever they are fully in view so stars on the lines above and below the winline count

On exchanging for nudges, the reels will respin. You will then only be allowed either to collect or gamble the nudges. On collecting the nudges, or losing a gamble, you may nudge the reels yourself or use the autonudge feature. This machine incorporates GAIN (Guarantee Against Imperfect Nudge) so, if you make a mess of it, the machine will undo your nudging and give you the best possible win. Once the best win has been nudged, the opportunity to gamble the cash will be offered but, this time, you will not be allowed to exchange the cash for more nudges.

When awarded nudges directly, the machine will offer the chance to exchange them for the cash win on the same line of the matrix.

After each turn, the machine may offer 'FEATURE HELD' where the number lit on the matrix stays illuminated for the next turn. If it does not, the light lit on the matrix will return to the starting arrow whilst the reels spin.

PROGRAM FEATURES:

Pretty colourful graphics

Autonudge

Α

Autoplay

Autonudge

Presentable attract mode	
Autohold	
GAIN	
Occasional commentary (need Currah Microspeech enabled)	
125% payout (Not quite as much as my Chances Unlimited program!)	
	KEYS:
S	Spin the reels
1,2,3	Hold or nudge the reels (press 'U' simultaneously when nudging to nudge up)
С	Collect win or cancel held reels
G	Gamble
E	Exchange between cash and nudges

Sounds something similar to the original (need AY-chip enabled)

KNOWN BUGS:

- (Minor, irritating) At the end of a turn when nudges have been offered or taken, the program generates the symbols it will give you ready for the next time you exchange cash for nudges and calculates how it will autonudge for 2 nudges, 4 nudges etc all the way up to unlimited nudges. Because of the algorithm I designed, this can occasionally take as long as 20 seconds. Don't panic if the program appears to freeze it will return control to you soon! Note that this may occur on the very first turn after initialisation!
- 2 (Equally minor, more irritating) If the numbers on the matrix land you on a nudge square, the calculations described above are not valid as you have not exchanged any cash for the nudges you have got. The computer must do the calculations afresh with the symbols which actually are on the reels so it is possible that a delay of up to 20 seconds could occur in this situation too. Most of the time, however, the delay is not or hardly noticeable.
- 3 (FATAL, soul-destroying) If you land on a nudge square and there are star symbols directly on the winline on both of the first two reels (ie neither is above or below the winline!) the program will appear to freeze and require a reboot. Out of the many thousands of turns I have had on this machine during testing and leaving it for hours on autoplay just to see if anything untoward occurred, this has happened only twice so I hope it will not annoy many people very often.

DISCLAIMER

I wrote this (and the others listed below) during the days of lockdown when I was reminiscing about my childhood. I don't intend to encourage gambling. These programs are meant for fun, especially for those who remember them. They differ from gambling in that you can't possibly win any money and, much more importantly, you can't lose any either!!

ALREADY PUBLISHED BY THE SAME AUTHOR!!

Chances Unlimited: https://spectrumcomputing.co.uk/forums/viewtopic.php?f=3&t=7741

STILL TO COME...

Snappy Viper

Lucky Strike (club machine)

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Chris217 Youtube channel of a very good friend who reignited my love of these fruit machines after many years of never having stood in front one and who has

kindly offered continuous support and encouragement for these programs.

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from cassettes into a form readable by a machine built in the third

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I know this program works as I intended!

Peter Jones For helping me with the process of delivering these programs and

documentation to Spectrum Computing and showing such patience with my

incompetence with anything designed after 1985.

TOO MANY FINAL WORDS ON THIS PROGRAM

For those interested in the bugs described above, there are two main differences between this program and the Chances Unlimited I released a little while ago – these are why CU is bug-free (I think!) and SLU is not:

- CU can never offer nudges when a symbols win is showing on the reels whereas SLU can. This means that SLU must perform extra calculations when this does happen in order to nudge the win off the reels on the first nudge whereas CU never has to consider this. It's easy for us humans to see this at a glance but not for the computer at least, not the way I programmed it!
- The real SLU simply nudges through wins when it GAINs you on unlimited nudges but my version does not. See the GAIN video on my YouTube channel for an exceptionally waffly explanation of why, among other things, it is possible for my SLU to give you only 50p for unlimited nudges! My CU GAINs unlimited nudges but allows itself (but not you!) to nudge through lesser wins.

I wrote these programs in the order Snappy Viper, Super Line Up, Chances Unlimited then Lucky Strike. Each time, I rewrote the autonudge calculator with (hopefully) some improvements over the previous program.

SLU starts its calculations by considering how it would do unlimited nudges, then 12 nudges, then 10 etc. This has the disadvantage that it may end up doing very time-consuming calculations more than once.

CU avoids this by starting at 1 nudge, then 2 etc. If it determines that it can't get a better win for the next higher number of nudges, it simply copies what it has calculated for the previous number, thus avoiding a lot of the work done by SLU (they do have the same reels, of course!) The longest time I've seen CU take to work out the entire ladder of nudges is just under two seconds so it is hardly noticeable to the player. Normally, there is no noticeable delay at all.

Before you ask — it's an enormous amount of work to rid SLU of these bugs. I learnt the lessons from it and incorporated them into CU — it was a completely new program after all. I couldn't face redoing SLU just to cut out the short delays and unlikely crash. It did not occur to me at the time that anyone else might ever want to play these games — I was simply doing it for fun as an intellectual challenge to avoid going completely insane during the lockdowns! I hope these bugs don't annoy anyone too much!

If you enjoy this program, please tell all of your 80s-fruit-machine-loving friends. Seek out Chances Unlimited if you've not already done so.

Here's my Youtube channel where you can find some 12 minutes of yapping from me about GAIN, among other enthralling videos:

https://www.youtube.com/channel/UCZ3FEI4xEq8C-W94AvDPN2w/featured

Please drop any comments to me at bjmzxs@gmail.com