

TWILIGHT ZONE

Manual Amendment

Adjustments Update

Software Rev: 9.4H

General Notes:

If you have comments, questions, or corrections to this file, please E-mail me at: mike@signal-ahead.com. This file is version 1.2; based off of ROM revision 9.4H.

It looks like we will never get a 9.4 (non-Home) version of the game. I have had several requests for the 'hacked' version which called itself 9.4BH. I cannot give this out, since it is hacked. This version is most likely the reason why we won't see a 9.4 version. Ted Estes now works for Pat Lawlor Design (www.patlawlordesign.com) which does games for Stern on a contract basis. (And they still have the Big Red Button) Support their work – go out and buy Stern games!

Change in Version 1.1: Uh, fixed the title. (Used to say only '9.4'.) Added a new update for the 'Door Spots' adjustment.

Change in Version 1.2: Update e-mail address, and some grammar changes, as well as cleaning up fonts. Still my #1 game. ☺

Change in Version 1.3: Updated the E-Mail address again. ☺ Fixed some formatting issues. Added info about PLD.

Of course, a big thanks to Ted Estes, for providing us Twilight Zone owners with something to keep us busy, and for working on this *in his free time*. As far as I know, this revision will be the very last for Twilight Zone, and with all the changes put into the software from L-1, its come quite a long way. Major updates in this revision over the last (9.3) are numerous, and mostly cosmetic changes. You can look at the Software Revision file for complete updates, but here are a few major updates:

* Multiball Magnet Catching (Games with 3 magnets installed only): Start multiball with zero or one ball in the Lock, and the Autofire kicker will load balls onto the magnets before releasing them for Multiball.

* Lamp Effects: **Many** lamp effects added and changed. A neat one includes flashers after a player enters high score initials.

* High Score Table Added: Now Twilight Zone has a buy-in High Score table, for games that had one or more buy-ins. (Among other Attract Mode updates: Player selectable Tournament Mode, Flip screens using flippers and Custom Message now uses 'cool' font, if possible.)

Again, this is the more than likely last revision for Twilight Zone, so if you find something wrong with the software, let Ted Estes know- but don't complain, bitch, request, moan, groan, or plead for something 'new'. In all reality, we very well **could** still be back at L-4.

This file uses no special typefaces, and can be printed easily. I tried using conservative margins, though they may need adjusting for better printing. The changes start on page 3, a clean printout for addition to the manual can be made by printing everything from page 3.

Reading Changes:

First on the Adjustment line will be a symbol. A '+' means that the adjustment is new, and a '~' means that the adjustment has simply moved (Changed Number). In the latter case, no other information will be given about it as the information in the manual for the adjustment is unchanged. '*' means that the adjustment has a new setting, or a setting for it has changed.

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A. Adjustments

A.2 Feature Adjustments

*** A.2 08: Spiral Extra Ball Memory**

This determines whether the extra ball lit by the Spiral Award stays in memory from ball to ball.

Settings: ON - Lit Extra Ball is held from ball to ball
 OFF - Extra Ball is not held after current ball.
 BY SPIRAL - If the Spiral Award is held over to the next ball, then the lit
 Extra Ball is as well.

Default: OFF

*** A.2 14: Door Spots**

Determines the number of door panels that can be spotted by other shots in the game.

Settings: 0 Only the Extra Ball light is spotted.
 1 #0 included, also spots 10Mil for Skill Shot.
 2 #1 included, also spots 'Battle Power' for Spiral or Hitchhiker
 3 #2 included, also spots 'Lite Gumball' for Left & Right Ramp
 4 First door panel awarded is 'LITZ'

Default: 1

~ A.2 34: Attract Mode Clock

Moved from 'A.2 32'

+ A.2 35: Balls In Gumball

How many balls are installed in the Gumball Machine. If more or less balls are installed, the game will report an error in the error report.

Settings: 2 - 4

Default: 3

+ A.2 36: Last Free Ride

The last ball that the Free Ride Time (A.2 27) is active for.

Settings: BALL 1 - BALL 5

Default: BALL 1

+ **A.2 37: Freeplay Message**

If set to OFF, the message 'Free Play' will not be shown. Instead, the game will track credits won and lost on the display, although games may still be started when no credits are on the machine.

Settings: OFF - ON

Default: ON

+ **A.2 38: Buy-In Count**

Sets the maximum number of buy-ins allowed per player.

Settings: 1 - 3

Unlimited

Default: 1

+ **A.2 39: Player Tournament**

If set to YES, player may hold both flipper buttons for 3 seconds to put game into Tournament Mode for the next game.

Settings: YES - NO

Default: NO

+ **A.2 40: Backup Buyin High Score 1**

+ **A.2 41: Backup Buyin High Score 2**

+ **A.2 42: Backup Buyin High Score 3**

+ **A.2 43: Backup Buyin High Score 4**

The first through fourth backup buy-in high score values. These values are loaded into the table when the high score table is reset.

Range: 00 - 999,000,000

Default: **A.2 40:** 950,000,000

A.2 41: 900,000,000

A.2 42: 850,000,000

A.2 43: 800,000,000

+ **A.2 44: Buyin High Score 1 Credits**

+ **A.2 45: Buyin High Score 2 Credits**

+ **A.2 46: Buyin High Score 3 Credits**

+ **A.2 47: Buyin High Score 4 Credits**

The number of credits or tickets to be awarded when a player passes the first through fourth high score values.

Settings: 0 - 10

Default: 1

+ **A.2 48: Lost-In-The-Zone Cheat OK**

If set to YES, player may press and hold the Buy-in button for 3 seconds to activate the cheat. When activated, the cheat will reset players score.

Settings: YES - NO

Default: YES

+ **A.2: 49: Mute-And-Pause OK**

If set to YES, player may hold flipper button and press the Buy-in button to activate Mute-And-Pause. Mute-And-Pause will then mute music and hold lower flipper up while pause timers. Player may un-pause the game by pressing the Buy-in button. Mute-And-Pause will automatically un-pause after 15 minutes. **Warning:** Possible flipper coil damage may occur if used for excessive amounts of time.

Settings: YES - NO

Default: YES

+ **A.2: 50: Multiball Start 3-Magnet Catch OK**

If set to YES, and there is two or more balls in the ball trough, the game will load the balls onto the three magnets before starting multiball. If set to NO, or if game does not have the Upper Right Opto (sw. #82) and Upper Right Magnet (sol. #22) installed, multiball will start like normal.

Settings: YES - NO

Default: YES

+ **A.2 51: Multiball Powerball Detect OK**

If set to YES, the game will attempt to detect the powerball in play by watching the Slot Proximity switch (sw. #57). If a powerball is detected, game will start Multiball Powerball mode, and will enter into Unknown Mode after multiball if necessary. If set to NO, game will not attempt to detect the powerball in play, and rely on the Trough Proximity switch (sw. #26) to determine whether the powerball is in play or not.

Settings: YES - NO

Default: YES

A.3 Pricing Adjustments

+ **A.3: 25 Allow Hundredths**

This is used for a custom door specification. If set to YES, then the values for A.3 12-15 are specified in units/hundredths (\$0.00). If set to NO, then the values are displayed in units only (\$0).

Settings: YES - NO

A.5 Printer Adjustments

+ A.5: 7 'NSM Stub Only'

Usage is currently unknown, for use with NSM Printer only.

Settings: YES - NO

Default: NO

+ A.5 8: Auto Printout

With the optional printer board installed, this adjustment allows the initiation of printouts whenever the game detects a printer connected to the game. Parallel printers are detected automatically by plugging them in and putting them on-line. Serial printers (or computers) are detected by sending a carriage return (ASCII 0x0D) or XON (ASCII 0x11). Notes:

- Only the table specified will automatically be printed with a printer is detected.
- If the printer is detected during attract mode or test mode, the printout will be produced right away. If detected during a game, it will take up to 10 seconds to be detected, which then the printout will occur. The game will resume after the printout is completed.
- Automatic printouts will only take place if the coin door is open.
- After an automatic printout has taken place, a 2nd printout is not possible until a game has started or the game entered into test mode.

Settings:	OFF	Disable Automatic Printouts
	MAIN AUDS .	Bookkeeping Menu: B.1
	EARNINGS	Bookkeeping Menu: B.2
	STD. AUDITS	Bookkeeping Menu: B.3
	FEATURES	Bookkeeping Menu: B.4
	HISTOGRAMS	Bookkeeping Menu: B.5
	TIMESTAMPS	Bookkeeping Menu: B.6
	NOVA AUDS .	Special Printout for German Distributors
	ALL DATA	All of the Above Data

Default: OFF

+ A.5 9: Automatic Line Fill

This setting affects what is sent to the printer after all the data in a line is sent. If set to **OFF**, printer-specific data is sent to the printer to begin the next line. If set to **FILL LINES**, the line will be padded with spaces until the Column Width (A . 5 01) is reached, then the printer specific data is sent for the next line. **FILL, NO CR.** will pad the data to the column width, but no data is sent to begin next line. **FILL, LF.** is same as the previous, except a Line Feed (ASCII 0x10) is sent at the end of each line.

Settings:	OFF
	FILL LINES
	FILL, NO CR.
	FILL, LF.

Default: OFF

T. Tests

+ T.14: Lamp Row/Column

This test allows individual rows and columns in the lamp matrix to be operated. This is useful for troubleshooting wiring and driver problems. Press the Up and Down buttons to cycle through the separate rows and columns.

+ T.15: Dipswitch Test

This test is used to show the positions of the DIP switches on the CPU board (U27). Pressing the start button during this test will display the Game ROM (U6) checksum.

~ T.16: Clock Test

Moved from T . 14

~ T.17: Gumball Machine Test

Moved from T . 15

~ T.18: Magnet Test

Moved from T . 16

+ T.19: Empty Balls Test

This test kicks out all balls loaded in troughs, lockups, poppers and kick-outs. Balls are also emptied from the gumball machine. Note: As the trough empties balls, they will stack up in the shooter lane, which may require manual cleaning to avoid jams.

U. Utilities

U.9 Presets

+ U.9 29 Install Home

This option makes the game setup optional for use at home. The adjustment changes for this option are listed below:

A.1 05 Replay System:	FIXED
A.1 07 Replay Start:	250,000,000
A.1 13 Replay Boost:	OFF
A.1 19 Match Feature:	30%
A.1 24 Show Date/Time:	YES
A.1 30 Power Save Level:	4
A.2 02 Extra Ball Percent:	FIXED
A.2 07 Dead End EB Mem.:	YES
A.2 08 Spiral EB Memory:	YES
A.2 27 Free Ride Time:	07
A.2 36 Last Free Ride:	BALL 5
A.2 37 Freeplay Message:	OFF
A.2 38 Buy-In Count:	3
A.2 51 Multiball PB Detect:	NO
A.3 16 Maximum Credits:	99
A.3 17 Free Play:	YES
A.4 04 Champion Credits:	5
A.4 05 High Score 1 Credits:	4
A.4 06 High Score 2 Credits:	3
A.4 07 High Score 3 Credits:	2
A.4 08 High Score 4 Credits:	1
A.4 09 High Score Reset:	OFF

+ U.9 30 Install #pinball

This installs requested settings by the IRC #pinball group. Changed values are listed below:

A.1 03 Maximum Ex. Ball:	10
A.1 15 Special Award:	POINTS
A.1 19 Match Feature:	10%
A.1 22 Clock Style:	24 HOUR
A.1 24 Show Date/Time:	YES
A.1 28 Min. Vol. Override:	YES
A.1 29 GI Powersaver:	4 MIN
A.2 07 Dead End EB Mem.:	YES
A.2 08 Spiral EB Memory:	BY SPIRAL
A.2 09 Door EB Memory:	NO
A.2 15 Piano Difficulty:	MEDIUM
A.2 16 Slot Difficulty:	MEDIUM
A.2 28 Buy-In Free Ride:	OFF
A.2 37 Freeplay Message:	OFF
A.2 48 LITZ Cheat OK:	NO
A.2 51 Multiball PB Detect:	NO
A.3 16 Maximum Credits:	99
A.3 17 Free Play:	YES
A.4 09 High Score Reset:	OFF