



To initiate, from the **MAIN MENU**, select the "UTIL" *Icon*. The **UTILITIES MENU** provides ways to quickly and easily customize your game with **Installs** (*pre-sets for game Standard & Feature Adjustments*), set-up a **Custom Message** (*short-cut to Standard Adjustment 41, Custom Message*), set-up **Custom Pricing** (*short-cut to Standard Adjustment 18, to the Custom Pricing Sub-Menu*), set-up the **Date and Time** (*required if the date and time is needed to be accurate for data dumps and for tournaments*), reset certain particular game data or perform a complete **Factory Reset** and to download game data, update or backup game code in the **USB MENU**.

All **UTILITIES, INSTALLS, RESETS MENU** and **USB MENU** *Icons* and there usages are explained throughout this chapter in the same order as seen in the Dot Matrix Display. **NOTE:** Depending on Game Type, Version, selections made, Dip Switch settings, location and/or areas, some *Icons* may appear non-functional or may not appear at all. **Installs (Adjustments), Icons and/or functions, order and operation are subject to change. If in doubt use the Factory Default Settings** (*review Install Factory on the next page*).

In displays where changes can be made or to perform a function, use the **GREEN Button** to go [**BACK**], exit or escape, the **RED Buttons** to [**</-**] MOVE BACK / LEFT / [**+ / >**] MOVE FORWARD / RIGHT to view the next audit in the group, and the **BLACK Button** to [**SELECT**] the sub-menus.



Go To Installs Menu

To initiate, from the **UTILITIES MENU**, select the "INST" *Icon*. The **INSTALLS MENU** provides **13 Installs** to vary **Game Play Difficulty** (*set with Feature Adjustments*) or **Game Play Type** and **Install Factory** (*restores all adjustments to Factory Defaults*).

For **detailed customization** or to check current **Adjustments Defaults** (*either changed by YOU in the Adjustments Menu or by this INSTALLS MENU or for Factory Default Settings*), see **Section 3, Chapter 4, GO TO ADJUSTMENTS MENU**. After completing one or more of the **Installs** in this chapter, go back to the **ADJUSTMENTS MENU** to see which **Standard and/or Feature Adjustments** have changed (*Feature Adjustments and/or settings are subject to change during production, and may differ than what is described in the tables at the end of this chapter*). The Dot Display will indicate if a setting is a **Factory Default** or not. If the settings are not to your liking, perform **one** of the following:

- 1.: **Manually** change the **Standard & Feature Adjustments** Settings (*perform this task in the ADJUSTMENTS MENU, see Section 3, Chapter 4, GO TO ADJUSTMENTS MENU*).
- 2.: **Install Factory** (*see the last install*) on how to reset all of the **Standard & Feature Adjustments** back to the **Factory Default Settings**.

Multiple **Installs can be set** to vary game play; however, for **Installs** that have *one or more* Adjustments in common, the **last** "Install" selected & **activated**, will **supersede** any previously changed Adjustment(s) from any prior **Installs**. Any adjustments which you changed and are not affected by the Install will remain as set.

For example, if you want a **5-BALL Game** set to **EXTRA EASY**: Select and **activate** the "5BAL" *Icon first* (which will typically change any **Feature** Difficulty Adjustments to **HARD**), **then** select & **activate** the "X.EZ" *Icon* to **change back** the Difficulty Adjustments to **EXTRA EASY**. However, if the "X.EZ" *Icon* was selected & **activated** first, **then** the "5BAL" *Icon* was selected & **activated**, the game will be set to a **5-BALL Game** set to **HARD**.

Remember, use the **GREEN Button** to go [**BACK**], exit or escape and the **BLACK Button** to [**SELECT**] to **INSTALL** your new setting(s).

INSTALLS MENU continued on the next page.

INSTALLS MENU Continued.



Install Extra Easy, Easy, Medium (**Normal or Factory Settings**), Hard or Extra Hard

To initiate, from the **INSTALLS MENU**, select one of the "X.EZ," "EASY," "FACT," "HARD," or "X.HD" *Icons*. The Dot Matrix Display

will indicate the **INSTALL EXTRA EASY, EASY, MEDIUM, HARD or EXTRA HARD** depending on choice. Follow the on-screen prompts to perform the **Install**. Set the **Game Play Difficulty** level.



Install 3-Ball

To initiate, from the **INSTALLS MENU**, select the "3BAL" *Icon*. The Dot Matrix Display will indicate the **INSTALL 3-BALL**. Follow the on-screen prompts to perform the **Install**.

Set the **Game Play Type** to 3 Balls per game (*Factory Default is 3 Balls per game, not including extra's...*).



Install 5-Ball

To initiate, from the **INSTALLS MENU**, select the "5BAL" *Icon*. The Dot Matrix Display will indicate the **INSTALL 5-BALL**. Follow the on-screen prompts to perform the **Install**.

Set the **Game Play Type** to 5 Balls per game (*not including extra balls earned by the player, if any*).



Install Competition

To initiate, from the **INSTALLS MENU**, select the "COMP" *Icon*. The Dot Matrix Display will indicate the **INSTALL COMPETITION**. Follow the on-screen prompts to perform the **Install**.

Set the **Game Play Type** to "Tournament" Rules. *Programming varies and is subject to change.*



Install Director's Cut

To initiate, from the **INSTALLS MENU**, select the "DCUT" *Icon*. The Dot Matrix Display will indicate the **INSTALL DIRECTOR'S CUT**. Follow the on-screen prompts to perform the **Install**.

Set the **Game Play Type** to programmer's choice. *Programming varies and is subject to change.*



Install Home Play

To initiate, from the **INSTALLS MENU**, select the "HOME" *Icon*. The Dot Matrix Display will indicate the **INSTALL HOME PLAY**. Follow the on-screen prompts to perform the **Install**.

Set the **Game Play Type** to "Home" Rules. *Programming varies and is subject to change.*



Install Novelty

To initiate, from the **INSTALLS MENU**, select the "NOV" *Icon*. The Dot Matrix Display will indicate the **INSTALL NOVELTY**. Follow the on-screen prompts to perform the **Install**.

***** This setting is recommended where local laws restrict certain game features. *****

Set the **Game Play Type** to "Restricted" Rules. *Programming varies and is subject to change.*

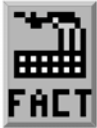


Install Add-A-Ball

To initiate, from the **INSTALLS MENU**, select the "A.A.B." *Icon*. The Dot Matrix Display will indicate the **INSTALL ADD-A-BALL**. Follow the on-screen prompts to perform the **Install**.

***** This setting is recommended where local laws restrict certain game features. *****

Set the **Game Play Type** to "Restricted" Rules. *Programming varies and is subject to change.*



Install Factory

To initiate, from the **INSTALLS MENU**, select the "FACT" *Icon*. The Dot Matrix Display will indicate the **INSTALL FACTORY**. Follow the on-screen prompts to perform the **Install**. **CAUTION!** All **Standard and Feature Adjustments** which were changed in the **INSTALLS MENU** or **ADJUSTMENTS MENU** are returned to the **Factory Defaults** (as indicated in the Dot Display in the **ADJUSTMENTS MENU**). *Note: To perform a complete **Factory Reset**, GO TO THE RESETS MENU. Escape back to the UTILITIES MENU, select the "RESET" Icon, then select the "FACT" Icon in the RESETS MENU (review the end of this chapter, Page 40, Reset Factory Settings).*

INSTALLS MENU continued on the next page.

Overview of Factory Defaults which change with a Particular Install

STANDARD ADJUSTMENTS (ADJUSTMENTS NOT AFFECTED ARE NOT SHOWN) ▼

Nr.	STANDARD ADJUSTMENT NAME	INSTALL FACTORY	INSTALL MEDIUM *	INSTALL 3-BALL	INSTALL 5-BALL	INSTALL COMPETITION	INSTALL DIRECTOR'S CUT *	INSTALL HOME PLAY *	INSTALL NOVELTY	INSTALL ADD-A-BALL
1	REPLAY TYPE	AUTO		AUTO	AUTO	AUTO			NONE	AUTO
2	REPLAY PERCENTAGE	10%		10%	10%	10%				10%
3	REPLAY AWARD	CREDIT		CREDIT	CREDIT	CREDIT				EX. BALL
4	REPLAY LEVELS	1		1	1	1				1
5	AUTO REPLAY START	20,000,000		20,000,000	20,000,000	20,000,000				20,000,000
6	DYNAMIC REPLAY START	60,000,000								
7	REPLAY LEVEL #1	15,000,000								
8	REPLAY LEVEL #2	30,000,000								
9	REPLAY LEVEL #3	45,000,000								
10	REPLAY LEVEL #4	60,000,000								
11	REPLAY BOOST	YES		YES	YES	YES				YES
12	SPECIAL LIMIT	1		1	1	1			1	1
13	SPECIAL PERCENTAGE	10%		10%	10%	10%			10%	10%
14	SPECIAL AWARD	CREDIT		CREDIT	CREDIT	CREDIT			POINTS	EX. BALL
15	FREE GAME LIMIT	5		5	5	5			NO FREE...	NO FREE...
16	EXTRA BALL LIMIT	5		5	5	5			NO EXTRA	9
17	EX. BALL PERCENTAGE	25%		25%	25%	25%			25%	25%
18	GAME PRICING	USA 5		USA 5	USA 5	USA 5			USA 5	USA 5
19	MATCH PERCENTAGE	9%		9%	9%	9%			OFF	OFF
20	MATCH AWARD	CREDIT		CREDIT	CREDIT	CREDIT			CREDIT	CREDIT
21	BALLS PER GAME	3		3	5	3			3	3
22	TILT WARNINGS	2		2	2	2			2	2
23	CREDIT LIMIT	30		30	30	30			30	30
24	ALLOW HIGH SCORES	YES		YES	YES	YES			YES	YES
25	HIGH SCORE AWARD	CREDIT		CREDIT	CREDIT	CREDIT			CREDIT	CREDIT
26	GRND CHMPN AWARDS	1		1	1	1			0	0
27	HIGH SCORE #1 AWARDS	1		1	1	1			0	0
28	HIGH SCORE #2 AWARDS	0		0	0	0			0	0
29	HIGH SCORE #3 AWARDS	0		0	0	0			0	0
30	HIGH SCORE #4 AWARDS	0		0	0	0			0	0
31	GRND CHMPN SCORE	75,000,000		75,000,000	75,000,000	75,000,000			75,000,000	75,000,000
32	HIGH SCORE #1	55,000,000		55,000,000	55,000,000	55,000,000			55,000,000	55,000,000
33	HIGH SCORE #2	40,000,000		40,000,000	40,000,000	40,000,000			40,000,000	40,000,000
34	HIGH SCORE #3	30,000,000		30,000,000	30,000,000	30,000,000			30,000,000	30,000,000
35	HIGH SCORE #4	25,000,000		25,000,000	25,000,000	25,000,000			25,000,000	25,000,000
36	HSTD INITIALS	3 INITIALS		3 INITIALS	3 INITIALS	3 INITIALS			3 INITIALS	3 INITIALS
37	HSTD RESET COUNT	2000		2000	2000	2000			2000	2000
38	FREE PLAY	NO		NO	NO	YES			NO	NO
40	PLAYER LANG. SELECT	YES		YES	YES	NO			YES	YES
45	GAME RESTART	YES		YES	YES	NO			YES	YES
48	BALL SAVE TIME	0:05		0:05	0:05	0:05			0:05	0:05
49	TIMED PLUNGER	OFF		OFF	OFF	OFF			OFF	OFF
50	FLIPPER BALL LAUNCH	OFF		OFF	OFF	OFF			OFF	OFF
51	COINDOOR BALL SAVER	NO		NO	NO	YES			NO	NO
52	COMPETITION MODE	NO		NO	NO	YES			NO	NO
53	CONSOLATION BALL	YES		YES	YES	YES			YES	YES
57	PLAYER COMPETITION	YES		YES	YES	YES			YES	YES
58	TEAM SCORES	NO		NO	NO	NO			NO	NO
63	LOST BALL RECOVERY	YES		YES	YES	NO			YES	YES

* Note: Currently, no Standard Adjustments are changed if Install EXTRA EASY, ... EASY, MEDIUM, HARD, EXTRA HARD, Install HOME PLAY or Install DIRECTOR'S CUT is performed.

SOME INSTALLS MAY CHANGE ADJUSTMENTS NOT NOTED ABOVE WITH FUTURE UPGRADES. YOU CAN ALSO REVIEW OR CHANGE ANY ADJUSTMENT IN THE ADJUSTMENTS MENU (SEE SECTION 3, CHAPTER 4). ADJUSTMENTS WHICH WERE CHANGED ARE NOT NOTED WITH FACTORY DEFAULT ON THE BOTTOM LINE OF THE DOT DISPLAY. THE SETTINGS HIGHLIGHTED ABOVE WILL OVERRIDE ANY MANUAL CHANGES MADE IN THE ADJUSTMENTS MENU.

STANDARD ADJUSTMENTS NOT LISTED ABOVE WHICH NEVER CHANGE WITH ANY INSTALL : 39, 41-44, 46-47, 54-56 & 59-62
INSTALLS MENU continued on the next page.



Overview of Factory Defaults which change with a Particular Install

FEATURE ADJUSTMENTS (ADJUSTMENTS NOT AFFECTED ARE NOT SHOWN) ▼

Nr.	FEATURE ADJUSTMENT NAME	INSTALL FACTORY	INSTALL EXTRA EASY	INSTALL EASY	INSTALL MEDIUM or 3-BALL	INSTALL HARD	INSTALL EXTRA HARD	INSTALL 5-BALL	INSTALL COMPETITION	INSTALL DIRECTOR'S CUT	INSTALL HOME PLAY *
2	POPS AT BALL START	1			1						
3	PINBALL SPELLOUT DIFFICULTY	MEDIUM	EXTRA EASY	EASY	MEDIUM	HARD	EXTRA HARD	HARD		MEDIUM	
4	MINI (PLAYFIELD) CHARM LETTERS SPOTTED	0			0						
5	MINI (PLAYFIELD) MAN LETTERS SPOTTED	0			0						
6	MINI (PLAYFIELD) SHREK LETTERS SPOTTED	0			0						
7	MINI (PLAYFIELD) PUSS LETTERS SPOTTED	0			0						
8	MINI (PLAYFIELD) FIONA LETTERS SPOTTED	0			0						
9	MINI PLAYFIELD MIN. PLAY TIME	15			15				▲ SEE INSTALL HARD ▼		▲ SEE INSTALL MEDIUM ▼
10	MINI PLAYFIELD MAX PLAY TIME	30			30						
11	MINI PLAYFIELD TIME DONKEY INCREMENT	1			1						
12	LETTERS PER MINI PLAYFIELD SHOT	2			2						
14	BURP MULTIBALL DIFFICULTY	MEDIUM	EXTRA EASY	EASY	MEDIUM	HARD	EXTRA HARD			MEDIUM	
15	PUSS IN BOOTS DIFFICULTY	MEDIUM	EXTRA EASY	EASY	MEDIUM	HARD	EXTRA HARD			MEDIUM	
17	POPS CARRYOVER	NO			NO						
18	SWAMP DIFFICULTY	HARD	EASY	MEDIUM	HARD	EXTRA HARD	EXTRA HARD			HARD	
19	LEFT RAMP DIFFICULTY	MEDIUM	EXTRA EASY	EASY	MEDIUM	HARD	EXTRA HARD				
20	BALL SAVER POST TIME	9			9						
21	DRAGON MULTIBALLS	3			3						

Sec. 3: Go To Utilities

* Note: Currently, no Feature Adjustments are changed if Install **COMPETITION**, Install **HOME PLAY**, Install **NOVELTY** or Install **ADD-A-BALL** is performed.

SOME INSTALLS MAY CHANGE ADJUSTMENTS NOT NOTED ABOVE WITH FUTURE UPGRADES. YOU CAN ALSO REVIEW OR CHANGE ANY ADJUSTMENT IN THE **ADJUSTMENTS MENU** (SEE SECTION 3, CHAPTER 4). ADJUSTMENTS WHICH WERE CHANGED **ARE NOT NOTED** WITH **FACTORY DEFAULT** ON THE BOTTOM LINE OF THE DOT DISPLAY. THE SETTINGS HIGHLIGHTED ABOVE WILL OVERRIDE ANY MANUAL CHANGES MADE IN THE ADJUSTMENTS MENU.

FEATURE ADJUSTMENTS NOT LISTED ABOVE WHICH NEVER CHANGE WITH ANY INSTALL : **1, 13, 16, 22 – 25**





Enter Custom Message

To initiate, from the **UTILITIES MENU**, select the "ABCD CUST MSG" *Icon*. The **SET CUSTOM MESSAGE** (a short-cut for Standard Adjustment **41, Custom Message**) provides an opportunity to have a text message appear in the the **Attract Mode**. Follow the on-screen prompts to complete [END].

Remember, use the **GREEN Button** to go [**BACK**], exit or escape, the **RED Buttons** to [**</-**] MOVE LEFT / CHOOSE NEXT [**+/>**] MOVE RIGHT / CHOOSE PREVIOUS, and the **BLACK Button** to [**SELECT**] as 'OK'.



Set Custom Pricing

To initiate, from the **UTILITIES MENU**, select the "PRIC" *Icon*. The **CUSTOM PRICING MENU** (a short-cut for Standard Adjustment **18, Game Pricing**, and setting selected is **CUSTOM**) provides an opportunity to set **Custom Pricing**.

Note ! MONETARY AMOUNT MUST BE SELECTED FIRST! Press [**BACK**] to - DECREASE or [**SELECT**] to + INCREASE the [**< \$ >**] monetary amount (e.g. look at the right side of the display from **\$0.25** to **\$0.50**). Press [**</-**] to - DECREASE or [**+/>**] to + INCREASE the **credit quantity** (e.g. look at the left side of the display from **0 CREDITS AT:** to **1 CREDIT AT:**).

IF EXAMPLE CUSTOM PRICING SETTING DESIRED IS :
1 Play for \$0.50, 3 Plays for \$1.00 and 7 Plays for \$2.00
THEN YOU WILL NEED TO PERFORM THE FOLLOWING :

REMINDER

In these menus:

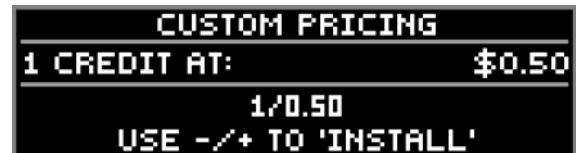
Press [**BACK**] to - DECREASE [**< \$**]

Press [**SELECT**] to + INCREASE [**\$ >**]

Step 1 The starting display appears as below if no prior **Custom Pricing** was installed.



Step 2 Press [**SELECT**] to + INCREASE to **\$0.50**. Press [**+/>**] to + INCREASE to 1 CREDIT AT:



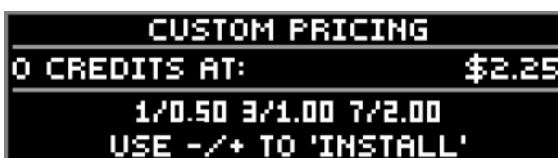
Step 3 Press [**SELECT**] to + INCREASE to **\$1.00**. Press [**+/>**] to + INCREASE to 2 CREDITS AT:



Step 4 Press [**SELECT**] to + INCREASE to **\$2.00**. Press [**+/>**] to + INCREASE to 4 CREDITS AT:



Step 5 Press [**SELECT**] to + INCREASE the amount once (example = **\$2.25**). Press [**</-**] once ...



Step 6 Press [**SELECT**] to **INSTALL**. Press [**</-**]/[**+/>**] or [**BACK**] to edit.



... or press [**+/>**] eleven times until **INSTALL** appears.

Step 7 Press [**SELECT**], press [**BACK**] twice to exit the **SERVICE MENU** with your **Custom Pricing** installed.



To correct or make new changes, reenter, which brings you to **Step 6**. Press [**BACK**] repeatedly until the monetary amount shown is the desired amount and then continue following the above steps with your new or corrected settings. *If you are still having difficulty or if you have any questions, please call Technical Support 800-542-5377 or 708-345-7700, option 1.*



Set Date / Time

To initiate, from the **UTILITIES MENU**, select the "TIME" *Icon*. The **SET TIME MENU** appears with the **MONTH** flashing. Setting the date and time is required for 'Data Dumps' and Tournament Start and End Dates. If the setting of Standard Adjustment **61, Time Format**, is set to **12-HOUR** (*Factory Default*) the time will be expressed in the **AM / PM format**. If Standard Adjustment **61, Time Format**, is set to **24-HOUR** the time will be expressed in the **24-hour format**.



Go To Resets Menu

To initiate, from the **UTILITIES MENU**, select the "RESET" *Icon*. The **RESETS MENU** provides six (6) functions to reset *only the Coin Audits*, reset *only the Game Audits*, reset *only the Grand Champion Score*, reset *only the High Score(s)*, reset *only the paid Credits (includes Service Credits)* or to reset **ALL DATA** back to the **Factory Default Settings**.



Reset Coin Audits

To initiate, from the **RESET MENU**, select the "COIN" *Icon*. **⚠ ONLY the Coin Audits** [Earnings Audits **5-12**], will be reset to zero (0), *Factory Default Settings*. Follow the on-screen prompts to perform the **Reset**.



Reset Game Audits

To initiate, from the **RESET MENU**, select the "AUD" *Icon*. **⚠ ONLY the Game Audits** [Earnings Audits **1-4**, Standard Audits **1-59** and Feature Audits **1-XX***], will be reset to zero (0), *Factory Default Settings*. Follow the on-screen prompts to perform the **Reset**. *varies per game title.



Reset Grand Champion (Score)

To initiate, from the **RESET MENU**, select the "GC" *Icon*. **⚠ ONLY the Grand Champion Score** [adjustable via Standard Adjustment **31**], will be reset to *Factory Default Setting*. Follow the on-screen prompts to perform the **Reset**.



Reset High Scores

To initiate, from the **RESET MENU**, select the "HSTD" *Icon*. **⚠ ONLY the High Score(s)** [adjustable via Standard Adjustments **32-35**], will be reset to *Factory Default Setting(s)*. Follow the on-screen prompts to perform the **Reset**. **Note:** *High Scores (but not Grand Champion Score) are reset automatically every 2,000 games (Factory Default Setting) [adjustable via Standard Adjustment **37, HSTD Reset Count**]*.



Reset Credits

To initiate, from the **RESET MENU**, select the "CRED" *Icon*. **⚠ ONLY the Credits (includes Service Credits)** [adjustable via Standard Adjustment **23, Credit Limit**], will be reset to zero (0), *Factory Default Settings*. Follow the on-screen prompts to perform the **Reset**.



Reset Factory Settings

To initiate, from the **RESET MENU**, select the "FACT" *Icon*. **⚠ ALL GAME DATA IS RESET!** (*with the exception of Earnings Audit **13**, Software Meter*). **NOTE: IF YOU HAD SET-UP CUSTOM PRICING OR HAD CHANGED ANY ADJUSTMENTS OR PERFORMED INSTALLS, IT IS SUGGESTED TO WRITE DOWN YOUR CHANGES PRIOR TO THE FACTORY RESET.** Follow the on-screen prompts to perform the **Reset**.



Go To USB Menu

To initiate, from the **UTILITIES MENU**, select the "USB" *Icon*. The **USB MENU** provides three (3) functions to download game data, update your game code or backup your code onto a USB Memory Stick. *Review the inside cover for information on how to update your game code.*



Dump to USB Memory Stick

To initiate, from the **USB MENU**, select the "DUMP" *Icon*. Follow the on-screen prompts to perform a **Data Dump** (download).



Update Game Code

To initiate, from the **USB MENU**, select the "UPDT" *Icon*. Follow the on-screen prompts *or review the inside cover for more information.*



Backup to USB Memory Stick

To initiate, from the **USB MENU**, select the "BKUP" *Icon*. Follow the on-screen prompts to perform a **Backup** (game code only). This backup feature does not retain adjustments and/or settings changes made.