

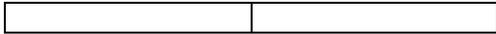
## CDS PROGRESSIVE SIGN

### PROLINK

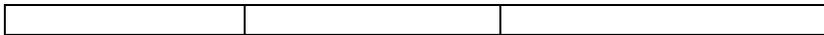
Display 1x1



1x2



1x3



2x3



#### Progressive System Terms "definitions, progressive system terms"

**Progressive Link** - includes the games, progressive controllers, and progressive signs that control and display a progressive jackpot amount that changes based on coins played (coin in) and jackpots won on the machine or machines in the system. For example, a jackpot may increment 1 cent for every dollar played (1% of coin in) until a player wins; then it will be reset to a specified amount and start incrementing again.

**Progressive controller** - device that collects coin in and jackpot information from games, calculates the amount the jackpot should increment and sends the new jackpot amount to the progressive meters.

**Progressive jackpot amount** - amount of money a player will win if the machine hits the right combination.

**Progressive escrow amount** - often referred to as 'hidden' amount. The amount of money contributing to the next jackpot after the current one is hit.

**Progressive display/progressive meter** - where the current progressive jackpot amount is shown. This can be an in-machine or overhead meter.

**Rate of Progression** - the amount that the progressive jackpot amount increments, based on a percentage of the amount of money that is played on the machines in the link for that jackpot.

**Progressive return signal** - the signal that indicates the new jackpot amount, returned to the games by the ProLINK Controller.

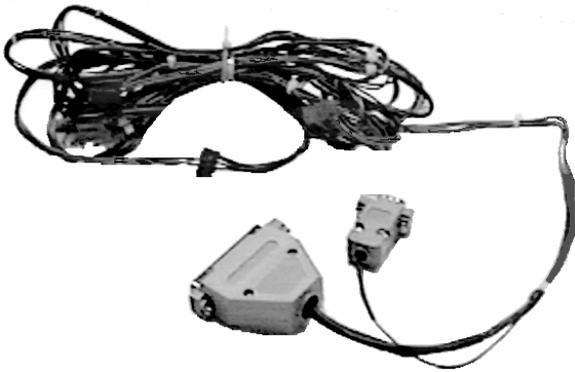
**Jackpot group or levels** - different progressive amounts on the same link. Different pay combinations on the game will trigger different groups or levels (for example, a royal flush will trigger a higher level than a straight flush).

Data harness - The communication line that links the gaming machines in a progressive link.

Machine pigtail - Wiring that ties individual gaming machines to the data harness. Connectors on the pigtail plug into connectors spaced along the data harness.



Pigtails act as the connection from slot or video machine to the ProLINK Game I/O data harness.



Example of a Data harness



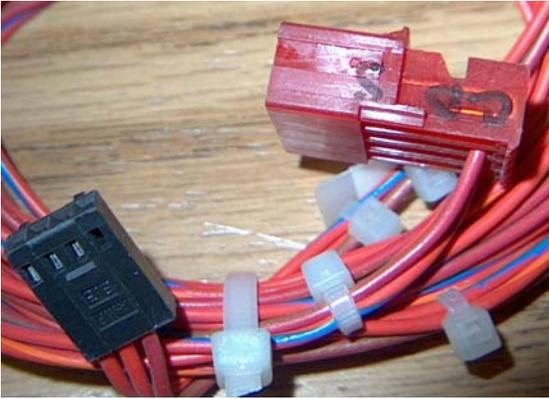
Example of a Pigtail XE "pigtail, example"

If a problem arises within a particular machine, the pigtail may be disconnected without disconnecting the entire cable harness. The progressive system will remain on line despite the malfunctioning machine. Game

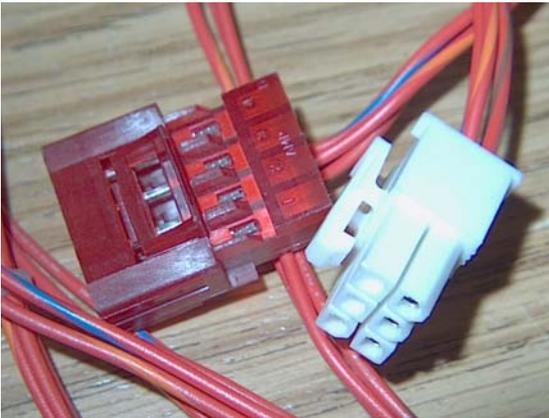
layout must be considered when ordering a data harness. For example, if there are multiple banks, steps between games, and so on, extra connections or a specialized harness will be required.



Game King 07-20491



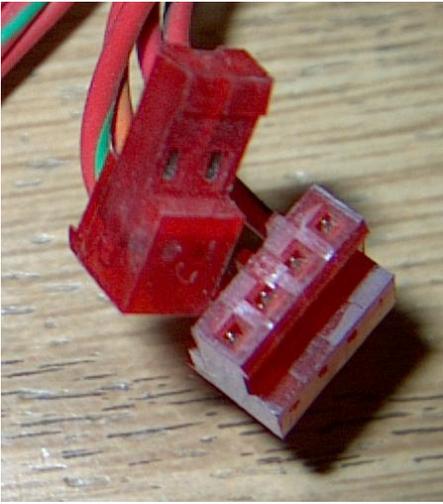
CDS



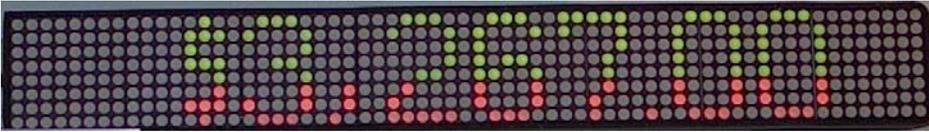
Williams 07-20296 ver B.0

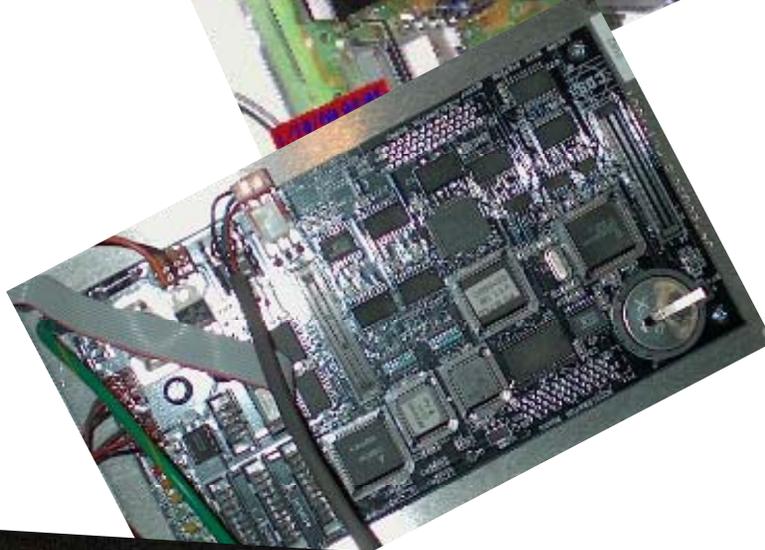


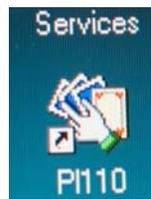
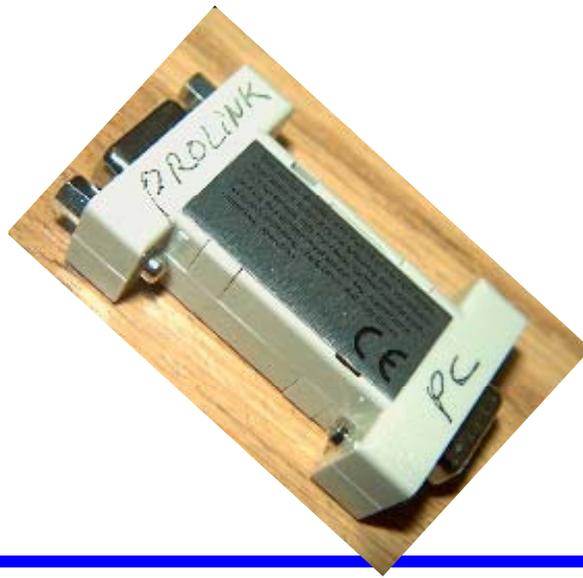
S-Plus 07-20173 Ver A.1



Sigma







1. Double Click on PL110 Icon to start the ProLINK Configuration Program.

The prompt "Com Port:" appears at the top of the screen. Type the number of the laptop COM port to be used (usually 1).

2. Using the standard configuration cable (CDS 07-20322), connect the COM port of the laptop to the RS-232 on the ProLINK Progressive Controller.

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#### ProLINK Configuration Program Menu

The ProLINK Configuration Program menu XE "ProLINK:Configuration Program menu" XE "configuration:ProLINK menu" is divided into two screens, as follows:

**Casino Data Systems  
ProLINK Configuration Program-Version 1.08**  
-----

"A" - Set Alternate Machine	"C" - Set Prog Return Com Format
"D" - Set ProLINK Date & Time	"E" - Set Current Escrow Amount
"G" - Get ProLINK Setting	"I" - Set ProLINK Communication ID
"K" - Disable Progressive after JP	"L" - Set Link Type
"M" - Set Default Machine Type	"N" - Set ProLINK Name
"O" - Set Machine Serial Protocol	"P" - Set Progressive Jackpot
"R" - Reset or Clear a Jackpot	"S" - Set Current Jackpot Amount
"T" - Set or Clear Test Mode	"U" - Configure ProVIEW Logic Board
"X" - Download Message to ProVIEW	"0" - Zero ProLINK Memory & config
"1" - Set Auxiliary Sign Protocol	"2" - Set ProSOLO General Config
"3" - Set Meter Sync Config	"4" - Set ProSOLO Meter Scripts
"5" - Set ProSOLO JP Level Display Format	
"Q" - Quit Program	

Enter Command:

1. Commands that store information or send information to the ProLINK (the screen shown above that is displayed when the PL program is started).
2. Commands that recall information from the ProLINK (the screen shown below is displayed when option "G" is selected). This information may be entered and retrieved through the listed commands.

**Get ProLINK Setups menu**  
-----

"A" - Get Jackpot Amount	"D" - Get ProLINK Date & Time
"E" - Get Escrow Amount	"H" - Get Jackpot History
"I" - Get ProLINK Communication ID	"J" - Get Active Jackpots
"L" - Get ProLINK Link Type	"M" - Get Machine Configuration
"N" - Get ProLINK Name	"P" - Get Progressive Configuration
"R" - Get Reset History	"S" - Get Slave Communication Info
"U" - Get ProLINK EPROM Version	"W" - Get JP Decrement Amounts
"1" - Get Auxiliary Sign Protocol	"2" - Get ProSOLO General Config
"3" - Get Meter Synchronization	"4" - Get ProSOLO Meter Scripts
"5" - Get ProSOLO JP Level Display Config	

Get what:

Enter Command:

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## ProLINK Set Up XE "ProLINK:setup"

Do the following steps to set up the ProLINK Progressive Controller. The remaining menu options are not required during the initial start-up.

1. If the ProLINK Progressive Controller is being set up for the first time, press < 0 > (zero) to clear the RAM of any previous configuration data.

2. Press < i > to select the Set ProLINK Communication ID option.

While standalone controllers may have any ID number, those linked together must have a unique address to communicate with a network server or other ProLINKs.

3. Type the new ID number and press <enter>.

Valid ID numbers range from 1-32.

4. Press < l > to select the Set Link Type option.

5. Review the information in the "Link Modes" section below before proceeding with step 6.

## Link Modes XE "link modes"

ProLINK controllers can be linked in a master/slave relationship, as follows:

- The master ProLINK calls each address (including itself) and receives the coin-in information for each controller's group of machines.
- The master ProLINK combines that information and calculates the new jackpot amount.
- This amount is returned to the slaves and their connected signs.

Every controller in this type of configuration drives meters and monitors machines. When configured properly, the programmed EPROM within each ProLINK will act as either master or slave, without a switch in hardware.

When a ProLINK is configured as a master or slave, the RS232 port will be disabled. The ProLINK controller shares the RS232 configuration port with the

Link port (master/slave communication). The ProLINK disables the RS232 port ten seconds after a reset and does not enable the port until another reset. If a command is received from the RS232 port before the port is disabled, then the ProLINK keeps the port enabled for one minute. After each subsequent command, the ProLINK restarts the one minute timer. The best way to configure the ProLINK is to start the configuration program, reset the power on the ProLINK, read the ID (G,R command) to set the one minute timer, then perform the necessary configuration. Keep in mind that an idle time of one minute causes the configuration port to be disabled and the ProLINK will need to be reset to enable the port again.

Note: ProLINKs that are not linked to other ProLINKs always keep the configuration port enabled.

The following table shows the three Link modes that can be specified.

	Mode	Description
0	None	This ProLINK runs in standalone mode. It controls the progressive link and will not communicate with other ProLINKs.
1	Master	This ProLINK is connected to others. It controls the progressive link. All other ProLINKs must be set as slaves.
2	Slave	This ProLINK is connected to others. It does not control the progressive link. There must be a master ProLINK connected to control the progressive link.
3	Monitor	Reserved for ProSOLO™ Configuration.
4	Linked	Reserved for ProSOLO™ Configuration.

6. Press the number that corresponds to this particular ProLINK controller's link configuration (0=None, 1=Master, 2=Slave), as described above.

7. Press < d > to select the Set ProLINK Date and Time option.

When a jackpot is hit, the ProLINK system records the amount, machine, date, and time in the jackpot history file. Selecting this option automatically replaces the ProLINK date and time with the PC's internal date and time.

8. Press < m > to select the Set Default Machine Type option.

This option sets the default machine characteristics. When the option is selected, a prompt requests the number of machines connected to the ProLINK.

Alternate machines on the line may be changed using the Set Alternate Machines option (see step 17).

9. Press the number key(s) that corresponds to the number of machines connected to this ProLINK (maximum of 32) and press <enter>.

PL.EXE requests the Default Machine Type next. Machine types are as follows:

- 1 = Steady JP (CI/JP0 multiplexed).
- 2 = RBP.
- 3 = Steady JP (CI separate from JP0).
- Standard 8 transition.

Refer to the appropriate Appendix for the settings to use for a particular manufacturer game type.

10. Type the corresponding number for the default machine type and press <enter>.

Next, the program prompts for the Default Denomination. Valid denominations are as follows:

- 0 - Penny.
- 1 - Nickel.
- 2 - Dime.
- 3 - Quarter.
- 4 - Half Dollar.
- 5 - Dollar.
- 6 - Five Dollar.
- 7 - Ten Dollar.
- 8 - Twenty-Five Dollar.
- 9 - Fifty Dollar.
- 10 - Hundred Dollar.
- 11 - Five-Hundred Dollar.

11. Type the corresponding number for the desired denomination default and press <enter>.

The program prompts for house numbers, if desired. House numbers are used by the ProLINK during jackpots and test modes. In these two situations, the ProLINK displays the house number on the ProVIEW meters.

12. If you want to use house numbers, press < y >. Otherwise, press any other key at the house number prompt and the current house number setting will remain unaltered.

Initially, the house number fields reflect the input pin number to which each game is connected (for example, pins 1 through 32).

13. To use house numbers, type the machine numbers, pressing <enter> after each entry.

Next, PL.EXE prompts for the Progressive Return Com Format and the following list of game types appears:

- None.
- IGT (amount only).
- Chameleon 1.
- Amount and Jackpot.

Refer to the appropriate Appendix for the settings to use for a particular manufacturer game type.

Some video games show the progressive jackpot amount on the screen during play. This option allows the user to select which format the progressive return will take.

Note: Video games with onscreen displays made by different manufacturers may be connected to the same ProLINK controller ONLY if their Progressive Return Com Formats are the same.

14. Type the corresponding number to select a progressive return type, or press < 0 > (zero) to cancel.
15. Press <enter> to return to the Configuration menu.
16. Refer to Appendixes A through N for the appropriate settings for each game type.
17. Press < o > to select the Set Machine Serial Protocol option.

ProLINK is able to monitor slot machines via an RS-422 port in addition to discrete connections (as configured with the M option; see step 8).

Currently, ProLINK supports the Bally Multicom and Sigma Supercontroller protocols and also supplies the Progressive Return Formats.

18. If a serial protocol is required, select the appropriate protocol from the list and press <enter>.

Refer to Appendixes A through N for valid selections for each machine type.

If machines of different types are connected to the same ProLINK, do steps 19 through 23; otherwise, skip to step 24.

19. Press < a > to select the Set Alternate Machine option.

This operates the same as the M option, but allows you to change the configuration for an individual slot machine.

ProLINK prompts you for the machine's input number on the line, not the machine's house number.

20. Type the machine's number and press <enter>.

21. Type the number that corresponds to the machine's signal type, as listed in step 8 and press <enter>.

22. Enter the denomination and press <enter>. Refer to step 9 for a list of denominations and codes.

23. Type the machine's house number and press <enter>.

Continue with step 24 for all machine types:

24. Press < p > to select the Set Progressive Jackpot Level option.

ProLINK monitors as many as eight (8) different jackpot levels at one time. Each level must be entered separately using the P option.

25. Type the appropriate jackpot level number. Level "0" is usually the top jackpot.

Next, the ProLINK requests a Progressive Type.

26. Press < 1 > to enable the ProLINK with the standard progressive type, or press < 0 > (zero) to disable the progressive type.

Press < 4 > to enable a special type for IGCA machines (Level 0 only).

Note: If the progressive type is an IGCA machine, no escrow is used and decrement amounts are used. Any jackpot below Level 0 will decrement the Level 0 JP by specified amounts. Enter the amount to decrement JP by (JP1 - JP 7). If no decrement is desired, enter 0.

The starting jackpot amount must be entered next.

27. Type the amount in dollars and cents and press <enter>.

28. Type the amount in dollars and cents for the maximum jackpot and escrow amounts, pressing <enter> after each value is entered.

Note: A maximum escrow amount of 0.00 will disable the hidden jackpot feature.

29. Type the jackpot increment primary and secondary rates in percentages and press <enter> after each entry.

Note: The secondary increment is used after the maximum jackpot amount is reached.

30. Type the jackpot increment primary and secondary rates in percentages for the escrow rates and press <enter> after each entry.

Note: These values are entered only if the maximum escrow is greater than zero.

31. Press < y > or < n > to use master/slave link type for the level.

If the ProLINK is a stand alone version, this option has no effect. If the ProLINK is a master or slave and you select N, this jackpot level will be treated as a stand alone progressive jackpot, ignoring the input from other ProLINKs.

The ProLINK stores all the configuration information and returns to the command prompt.

## R Reset or Clear a Jackpot

Should a false jackpot occur, selecting the R option allows the user to edit the jackpot status and reset the jackpot and escrow amounts to their previous levels. When this option is selected, ProLINK requests the jackpot record number.

1. First, determine the record number by pressing < g >, then <h>, at the command prompt to select the Get Jackpot History option.
2. Type the desired record number and press < enter >.

ProLINK provides three options for the jackpot record: Cancel, False, and Paid.

3. Type the corresponding option number and press <enter>.

If the process is canceled, the ProLINK returns to the command prompt. If False or Paid is selected, the ProLINK requests a new jackpot amount.

Type the new amount and press < enter >, or press < 0 > (zero) to leave the amount unchanged.

ProLINK requests a new escrow amount.

4. Type the new escrow amount and press <enter>, or press < 0 > (zero) to leave the amount unchanged.

## S Set Current Jackpot Amount

The ProLINK requests the jackpot level. Selecting this option allows you to set the current jackpot to a user-entered amount.

1. Type the jackpot level number and press <enter>.
2. Next, type the new jackpot amount and press <enter>.

5. ProLINK returns to the command prompt.

#### Other ProLINK Options XE "ProLINK:other options"

The remaining options, listed in alphabetical order, are unnecessary during initial start up. Select them as they are required for your system

##### E Set Current Escrow Amount

Use this option if the escrow amount needs to be changed without changing the jackpot amount. ProLINK requests a jackpot level.

1. Type the jackpot level number and press <enter>.
2. Next, type the new escrow amount and press <enter>.

Important: It is a gaming regulation violation to lower the escrow amount unless there was a malfunction, for example, a missed jackpot.

##### G Get Data From ProLINK

This option retrieves information from the controller. Pressing the G hotkey displays the "Get ProLINK Setups Menu:"

Press the key that corresponds to the desired secondary option in the following list:

##### A Get Jackpot Amount

This option displays the current jackpot amounts for all levels.

##### D Get ProLINK Date & Time

This option displays the ProLINK current date and time.

##### E Get Escrow Amount

ProLINK displays the current escrow amount for all levels.

##### H Get Jackpot History

This option displays the last one hundred jackpots registered on that ProLINK controller. The listing shows the ProLINK record number, the jackpot level, the machine ID, winning jackpot amount, reset amount, date, time, current status, and total Coin In for each jackpot.

##### I Get ProLINK Communication ID

This option displays the ProLINK communication ID.

J Get Active Jackpots

This option displays jackpots that are currently active. The listing shows record, level, house number, input number, link ID, win amount, reset amount, date, time, and status.

L Get ProLINK Link Type

This option displays the ProLINK's link type: standalone, master, or slave.

M Get Machine Configuration

This displays a listing of machines currently connected to the ProLINK controller, including their ProLINK record numbers, machine signal types, house numbers, denominations, total Coin In, the Progressive Return Communication Formats, and the game serial protocols. The ProLINK scrolls through all thirty-two machines before returning to the command prompt, even if there are fewer than thirty-two machines on the link.

You can press < q > at any time during the scroll to interrupt the G option.

N Get ProLINK Name

This option displays the ProLINK's name.

P Get Progressive Configuration

This option displays the current progressive configuration. The listing shows the jackpot level, progressive type, minimum and maximum jackpot and escrow levels, primary and secondary rates for jackpots, escrows, the current disable after jackpot settings, and use link setting flags.

R Get Reset History

This option displays the records that show when power to the ProLINK controller has been reset. The listing includes record number, date, and time.

S Get Slave Communication Info

This option displays the status of all communications links between the ProLINK controller and other devices. The total number of errors detected is also displayed.

Note: This command is only useful on a master ProLINK. It is also best to use the system In/Out port as the RS232 port is lost when the ProLINKs are communicating in Master/Slave mode.

V Get ProLINK EPROM Version

This option displays the ProLINK EPROM version, date, and checksum.

W Get JP Decrement Amounts

The IGCA-type progressives will return the amounts by which the lower level jackpots increment the JPO. This is used only for the IGCA-type progressive.

1 Get Auxiliary Sign Protocol

Displays either the jackpot or escrow amount that is being displayed on an auxiliary sign.

3 Get Meter Sync Config

Displays the meter configuration selections, if entered using option 3, Set Meter Sync Config (see option at end of this list).

## Testing XE "Testing"

After the ProLINK is installed and configured, the link must be tested before opening the bank of machines.

Follow these steps:

1. Verify that the jackpot amount(s) are displayed properly on all meters and games.
2. If the amounts do not display correctly, troubleshoot the problem(s) and correct them (for example, improper wiring, inaccurate configuration, and so on).
3. Test the game signals by putting the ProLINK in test mode and coin-testing all machines.

Verify that when a coin is played, the house number is displayed on the meters.

If house number does not appear, you need to correct the problem. For example, ProLINK may not be properly connected to this game or either ProLINK or the game is not properly configured. Refer to "Troubleshooting" later in this manual.

4. Take the ProLINK out of test mode.
5. Verify that the Rate of Progression XE "Rate of Progression:description" (ROP) is correct by playing coins and watching the meter increment.

We recommend that you play several coins to ensure that the meter is incrementing properly and no rounding errors occur.

The rate of progression is the amount a jackpot is increased as a percentage of dollars played. A 1% ROP will contribute one penny to the jackpot for every dollar played (if the machines are quarter denomination, then four coins must be played to increment the jackpot by one penny). The chart on the following page shows various ROPs with the appropriate PL entry and number of coins to increment a jackpot by one penny.

ROP (%)	PL.EXE ROP Entry	Number of coins to increment JP by 1 penny		
		Dollar Game	Quarter Game	Nickel Game
1	1.0	1	4	20
1/2	0.5	2	8	40
1/4	0.25	4	16	80
1/8	0.125	8	32	160
1/10	0.1	10	40	200
1/16	0.0625	16	64	320



CONFIGURE ProView Logic Board

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CDS PROLINK RS232

Female DB9	Male DB9
Pin 2 White	Pin 2 White
Pin 3 Red	Pin 3 Red
Pin 5 Black	Pin 5 Black

