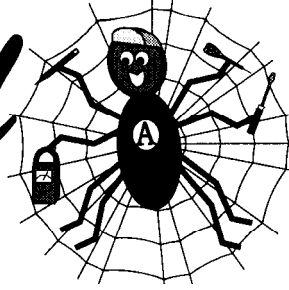


Arachnid Tech Tips



This publication is provided as an aid for field technicians and operators who troubleshoot, repair, and maintain Arachnid games. It is a technical tool designed to keep all the latest updates, service bulletins, suggestions and ideas together in one package

A Publication Especially for Operators and Technicians who service Arachnid Products

Handicapping with Dartman III... Version 1.2

One question asked frequently is: Should I add handicapping to my league? There is no firm answer to that question, however there are some good reasons for considering it. The obvious reason is that handicapping levels the playing field between players with different skill levels. In other words, it makes league play fun for the beginning or average player and more challenging for the expert player. Keeping both the beginner and expert competitive will sustain interest in league play and the coins flowing. With this in mind, why wouldn't everyone use handicapping within their league?

Separate Leagues, Divisions, or Handicapping?

Before you consider using the handicap, or spot *dart*, method of equalizing differences between player skill levels; you need to answer a few questions. Are you running a large league, or multiple leagues? Do you know the skill level of your players? Is there a large difference in skill level between your players? If you can answer yes to any of these questions, you might consider separating your players into divisions or leagues based on skill level. Using either of these methods, you can still supplement this segregation with spot dart handicapping.

If you are running a small league, where the number of players is limited, it may not be feasible to establish separate leagues or break the league into divisions. In that case, if you have a large difference in skill level, you are limited to using spot dart handicapping or run the risk of having less skilled players dropping out before the season ends. If you have made the decision to use spot dart handicapping, the remainder of this article explains how to set it up within Dartman III.

Turning Handicap On

Before you can set up handicapping, you must turn it on. This is done by choosing [Setup New league] or, if the league already exists, choosing [Modify] from the LEAGUES menu. In the center of this screen you have the choice of toggling handicapping on or off for Cricket and X0 1, by placing or removing an X in the brackets. Depending on the Type of league you have chosen; Combo, Cricket, or X01; the handicap options you have available will be printed on the screen in yellow. Unavailable options will be shown in red. The "dot" shown in the parentheses before "Pl" shows that handicapping will be applied to the indi

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Arachnet™ and Grounding...

When all your games at one location are connected together using 4-conductor phone cable, you have an "Arachnet™ Game Network". We will call the phone cable running from game to game through Corn In and Corn Out, the network "data bus." This will avoid confusion when referring to the "phone line" connected to the modem through the Line jack (J10) or the "data bus" connecting the games through Corn In and Corn Out (J8 & J6)

...CONTINUED ON PAGE 4...

..HANDICAPPING FROM PAGE I..

vidual player. The Team handicapping option is not available at this time and will always be shown in red. Once all the information on this screen is accurate and complete; choose << ok >> to save the information and return to the LEAGUES menu. Choose [Previous Menu] to return to Dartman III's Main Menu. You have now told Dartman III that you want to use handicapping for this league. Your next task will be to set the specific way in which handicapping will be applied to the players in the league.

Getting Ready for Setup

Before continuing with the handicap setup procedure, enter all the information for Locations, Teams, and Players into the system for this league. Depending on which version of Dartman III you have, some of the options described below will not exist; therefore they will not be available for your use. Starting with Version V 1.2 you are given two methods for establishing the spot dart partitions between the players in a league: the Lookup Table and Bell Curve methods. The Lookup Table allows experienced operators to manually set spot dart partitions and automatically update player position, within the partitions, as new stats are entered into the system. The Bell Curve method sets the partitions automatically, based on player stats; however, you will need to run the Handicap Setup weekly to update player positions. The latter method is the only one available in Dartman versions VI.0 and V 1.1. If you are new to league operation, handicapping, or partitioning, the Bell Curve method is the best place to start. Both methods will be described below.

Using the Bell Curve Method

From the MAIN menu choose [PLAYERS] to open the PLAYERS menu.

From the PLAYERS menu choose [Handicap Setup]. At this point, if you are using Dartman III, Version V1.2, you will be given the choice: "Use lookup table for handicapping...?", Choose < No >. You will be taken to the "Bell Curve Handicap Setup" screen. If you have an older version you will automatically be taken to this screen when you choose Handicap Setup from the Players Menu. There are four areas where you need to make settings: Type, Spot Darts, and Source File (on this screen) and Spot Dart Partitioning (on the next screen).

Selecting the Type (of game)

Start by choosing either Cricket or X01. If Combo was chosen earlier, as the type of league, both game types will be available. In a Combo league you will have to setup handicapping for Cricket and X01 separately. In other words, you will set all your choices under: Type, Spot Darts, Source File, and Spot Dart Partitioning, for Cricket - then go back, select X01 and complete all choices for that game type.

Once you have chosen the game type, you will then choose the player accomplishment that the program will use to rank your players and set the spot dart partitions. Your choices under Cricket are:

MPR Marks Per Round;
MPD Marks Per Dart;
SPRE Spot Dart Ranking Evaluation;
%Wins Percent of Wins to total games played; or,
Wins Number of Wins.

For X01 games (301 oi/oo and 501 oi/oo) your choices are the same; except where Points Per Round (PPR) and Points Per Dart (PPD) are substituted for MPR and MPD as used in Cricket. Note: The National Dart Association currently uses MPR for Cricket and PPD for X01, they have discontinued the use of SPRE.

Setting the Options - Spot Darts

Moving on to the Spot Dart section; you will now type in the maximum number of spot darts allowed for this game type. A setting of 3 to 6 is fine; however you can set it as high as 9. This should be based on the range of player skill level within your league. The larger the range, the higher number of spot darts allowed and vice versa. CAUTION: Even though this field will accept double digits, anything above 9 will cause an error that will shut down the program!

Choosing *Default Partitions*, by placing a X in the brackets, will tell Dartman III to automatically calculate and place the spot dart partitions for your league. If you do not choose this option, you will have to manually set the partitions. The program will place the partitions at the bottom of the player list.

The next option, *Exclude Zero Stat*, is available only in Version V1.2. This option, when chosen, will tell Dartman III to exclude all players with no current stats or history, from the Spot Dart Player List. They will be included on the list and assigned a handicap as their stats are entered into Dartman III. NOTE: Leave this option unselected when setting up a new league where none of the players have any history (See "*Player List and Partitions*" below).

The last option in this section is *Base on game*. Here you choose what game stats Dartman III will use to calculate player ranking and partitions, on the Spot Dart Player List. Placing the cursor in the box and pressing Enter will bring up a list of games to choose from. Highlight the game of your choice and press Enter to select. Make sure that the game you choose is one that is used in match play. Once *Base on game* is chosen, the Spot Dart section is complete.

CONTINUED...

Setting the Options - Source File

The Source File section is used to tell Dartman III where to obtain the statistics used in calculating player ranking and partitions, for the Spot Dart Player List in the next screen. The first time you run Handicap Setup, History will be the default and Current each time thereafter. Choosing History, Dartman III will look for player stats from previous league play that have been saved to the history file. Choosing Current, will use the league's current player stats.

Once you are content with all selections on this screen, choose << OK >> to move to the next screen.

The Spot Dart Partitioning Screen

The first thing you see in this screen, at the top right, is the heading: Game. This will show which game type and player accomplishment you are working with. This is shown for your information and can only be changed in the previous screen.

The first option to set is Player Edit. This option, if selected, will allow players to change their number of spot darts at the Galaxy dart board. This option should be selected. As player statistics are entered into Dartman III the amount of spot dart allowed a particular player will vary along with a change in their skill level. Adding the Spot Darts Allowed field, in Custom Reports Setup, to your weekly Player Standings report will allow the players to make the necessary changes. If Player Edit is not selected, the only way to reflect a change in their spot darts allowed, at the Galaxy game, would be to reprogram the Team Card. Printing an occasional Spot Darts report, choosing Detail, will allow you to quickly determine if a player is abusing the edit privilege. This report shows Spot Darts Allowed and Spot Darts (actually) Used, side by side for each player, so a quick comparison can be made.

The next two options; New Sub Darts and Zero Stat Darts, deal with players that have no statistical history. The number entered in New Sub Darts is the number of spot darts allowed for any new substitute player entered at the Galaxy game. This does not include substitute players entered into the system and printed to a Team Card. Zero Stat Darts is the number of spot darts allowed any players that do not have any previous stats. This option will only be available once you choose Exclude Zero Stat in the previous screen. Both of these options can be set to 0 (zero) unless you have a reason for allowing spot darts to players without knowing their skill level.

Player List and Partitions

The entire right side of the screen is taken up by the Spot Dart Player List. There are a couple of points to remember before the use of this list is covered. If the players in your league have no history (previous or current stats) they will all show up on the list as 0 (zero) spot darts allowed, with all the partitions at the bottom of the list. If you chose Exclude Zero Stat on the previous screen those players with no history will not show up on the list at all. If none of your players have any history, and you chose Exclude Zero Stat, you will NOT reach this screen. When you chose << OK >> from the previous screen you would have been taken back to the Players Menu, skipping this screen. You will not be able to set any options on this screen, such as Player Edit, before writing your Team Cards. This is the reason, as mentioned earlier, for not choosing Exclude Zero Stat when first setting up a league. The Exclude Zero Stat option would be best used after league play has begun and player stats have been loaded into the system.

Assuming your players have previous or current stats, you would see the following items from left to right across the list: the players ranking, e.g., measured in Marks Per Round or Points Per Dart

(based on the Game Type and Accomplishment chosen in the previous screen); the players name; and the spot darts allowed. Dartman III will have calculated the break points and placed the partitions between the players. All players within a partition will be assigned the same number of Spot Darts. If you feel you need to adjust the partitions manually, you can do so by moving either the players or the partitions. To do this, either point to the up/down arrow to the left of the player name or partition with your mouse, press and hold the left mouse button, drag your choice to a new location, then release the mouse button; or select your choice by highlighting it, hold down the Control [CTRL] and use the up and down arrow keys to move your selection. After making a change to the list choose < Update > to see how the list is affected.

Once you have selected all your options and made any changes to this screen, choose < Done > to return to the Players menu. If your running a Combo league, you must return to Handicap Setup, choose the other Game Type and repeat this setup process. Once that is done, you have successfully set up your league to use Spot Dart Handicapping with the Bell Curve Method. To maintain the Player List and Partitions throughout the season, return to the Spot Dart Partitioning Screen after each new set of stats are entered into the league and select < Update > to include the new stats in the calculations.

Using the Lookup Table Method

This method allows you to manually set the Breakpoints for your league. Breakpoints are the same thing as Partitions in the Bell Curve method (covered above). In this method, the program will not calculate the breakpoints. You will have to decide where to set them. It is beyond the scope of this article to cover the theory behind setting breakpoints for a specific league. However,

you can get an idea of how they should be set by running the Bell Curve Method and observing where the program calculated the partitions (breakpoints). Other than providing the Lookup table for manually entering the breakpoints the setup for this method is similar to the Bell Curve method, except as described below.

Choosing << Yes >> when prompted to use the Lookup Table brings up the Handicap Lookup Table Setup screen. This screen is similar to the Bell Curve Handicap Setup screen. A few changes have been made to support this method of handicapping. In the Type section, the new option Auto is given. Auto allows the program to automatically update the players handicap (spot darts allowed) when new stats are loaded into the league.

On the right side of the screen the Use History Files is used to toggle between history files and current stats; checked for history; unchecked for current. As there is no Player List associated with this method, the Player Edit and New Sub Darts options have been moved to this screen. The big difference on this screen is the < Table > function. Choosing this option will take you to the Handicap Lookup Table.

Setting up your Table

Dartman III provides four commands, shown at the bottom of the screen, used in setting up and modifying your table.

<F1 O> Delete: Allows you to mark a line for deletion. When you exit the screen, any lines marked will be deleted.

<F6> Un-Delete: Will unmark a line that was marked for deletion.

<F7> Append: Will add a line, filling in the first four columns. You can then enter the breakpoints and amount of spot darts in the remaining three columns.

<F4> Copy: This command will copy the information from a previously completed table. You can use this method to bring up one of the sample tables provided with Dartman III to get an idea of how the table should be set up.

When you first open this screen the table should be blank. To begin entering your information, press <F7> to add a line. Dartman III will enter the information about your league and game type in the first four columns, based on information you provided in the previous setup screen. You will then enter your information in the next three columns; breakpoints and spot darts. When the line is completed, pressing F7 again, will bring up another line. When your table is complete, exit the screen by pressing Escape [ESC], and your changes will be saved.

If you are setting up a Combo league, as in the Bell Curve method, you will have to repeat this setup process for the other game type, before you are finished setting up the handicapping for this league. Once you have saved your table(s) you can reuse them in other leagues by using the <F4> Copy command.

Using either of the above methods above, there are a few points in common. Cricket and X01 must be set up separately. You must choose the accomplishment to rank players by: MPR, PPD, WINS, etc. Specify the maximum amount of Spot Darts Allowed. Choose the specific game the handicap will be based on, e.g., Crk for Cricket and 30 1 o for X01. Allow Player Edit or not. Choose the source files where the program will look for stats: history or current.

If you have any questions about the material covered in this article or handicapping in general see "HOW TO REACH US" on the back cover.



...GROUNDING FROM PAGE I...

When you are connecting the game with a modem to other games, in one location to form a network, you should be aware of problems associated with grounding. If you have one (or more) games at the location that are not grounded and one that is - you may be pulling an AC voltage through your connecting "data bus" cables. This can cause, at minimum, noise on your data lines that will disrupt automatic stat collection, and could possibly destroy the Bus Transceiver chip (U24) on the main PC board.

There are a couple of tools to add to your toolbox that will help you diagnose grounding problems. First you should have an AC outlet analyzer, which are available at Radio Shack or your local hardware store. The one we use is inexpensive and works just fine. When plugged into an outlet, it has three lights on the face that indicate the condition of the circuits; hot, ground, common and also shows polarity.

The second tool is a simple "break out box" that can be made from the following supplies:

- 1) 4-conductor Modular phone jack;
- 1) 4-conductor RJ-11 connector; and,
- A short length of 4-conductor phone cable.

To construct the box - cut and connect the wires to the terminals as shown in Fig. 1, on the following page.

To use the breakout box, remove the data bus from one of the games in the network at either the Corn In or Corn Out jack. Plug the RJ-11 connector (A) on the breakout box into the jack that you just removed the data bus from. Then plug the data bus into the jack (B) on the other end of the box. You are now ready

CONTINUED...

to check for AC voltage on the "data bus."

Set your meter to measure AC volts and connect the leads across the terminal screws of the breakout box. With all games powered up, check for voltage between terminals 1 and 3, then between terminals 2 and 4. You should have zero ac voltage across the terminals from one side of the box to the other. If so, then all games in the network are grounded properly through the wall outlet or NONE of them are grounded. If you get a reading of greater than zero across any of the terminals, then you have one or more games that are not properly grounded and one or more that are. When one game is grounded and another is not, the data bus serves as a path to ground between games which can lead to the

problems mentioned above - damage to the U24 chip or communications not working properly.

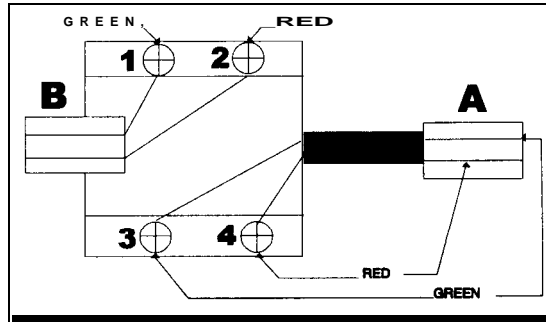


Fig. 1

The next step is to find out which game(s) are not properly grounded through the wall outlet. To do this, **disconnect all the data bus cables between the games.**

Using your outlet analyzer, check the outlet used for each game individually for correct polarity and ground.

If you find an outlet without a ground or incorrect polarity, correct the problem prior to reconnecting the network data bus lines. Although you will not get any voltage across the data bus if all games are ungrounded - this is NOT recommended for safety's sake.

Follow this procedure every time you set up a new network, after any electrical work has been conducted at a location, or if you are experiencing data collection problems, to avoid hardware damage, and help to keep your leagues running smoothly.



Where's My Stats?...

You've entered all the information for your leagues: league setup, locations, teams, players, and playing order. You have collected stats for half a season. Now, delete it all and start over. No one would do that on purpose, but it can happen. One of the first things we learn about computers is that things can go wrong - a hard drive fails, a loss of power knocks out your computer and corrupts your data files. What we can be sure of, is that all your time and effort CAN be zapped into oblivion..

Just as you insure your home or car against accidental damage, you can insure your data against accidental loss. About computer failure, someone once said: "It is not IF, it is WHEN." If you are not backing up your data, on a regular basis, you are in for a lot of work when the inevitable happens. Having a backup copy of your data might mean the differ-

ence between copying a few files back to the hard drive or entering hours of information from the keyboard. The latter is assuming that you have printouts of the data to re-enter. If the only place your data exists, is on your hard drive, and the drive fails, it will be nearly, if not completely, impossible to recover.

Computers are a great tool for automating league management. Anyone who has managed a league manually and then switched to using a computer program like Dartman can attest. Unfortunately, computer data is more susceptible to loss than paper records stored in a file cabinet. On the other hand, computers make the process of archiving - backing up your data, easier.

If you are running Dos 5.0 or less on your computer, you can use the automatic backup feature of Dartman III. When you exit Dartman III, you are asked if you want to backup your data to floppy disk. If you choose to do so, Dartman runs a batch file that calls the BACKUP utility that came with Dos. This utility

copies all the files, with the extension .dbf, from the Data subdirectory, to floppy disks.

With the release of Dos 6.0, the Backup utility was replaced with MSBACKUP. With the release of Windows 95, the earlier backup utilities were replaced with BACKUP, which is not the same as the original supplied with Dos 5.0 or less. If you are running either of these newer operating systems, chances are that Dartman's backup utility will not work. However, you can still make an archive of your data, using either of these new utilities to copy the database files (those with the extension .dbf) from the Data subdirectory to floppy disks. See the documentation or help files that came with your computer to find out how to use these new utilities.

You cannot eliminate the possibility that your data will be lost. However, you can eliminate a lot of wasted time and frustration, if you have a backup copy, when things go wrong.



FAQs...

Frequen t/y Asked Clues Cons.

Q. How do I add a BYE in Dartman III

A. The proper way to add a BYE is in the Division Setup option on the Teams Menu. Pressing [F6] will add a BYE and [F7] will delete an existing one.

Q. Can I just create a team called "BYE?"

A. It is not recommended. Not only is a BYE a place-marker used in scheduling, it is also used in the financial section of Dartman III to denote a fictional team that is not required to pay weekly fees.

Q. Can I have three teams in one location with only one Galaxy Game?

A. No. If a location has one game and two teams, you will have one team at home every week and one away. If the location has one team, they will be home only half of the season. However, if a location with one game sponsors three or more teams, they will not have enough Galaxy Games to support their home teams.

Let us know what you think...

We are updating the look and feel of Tech Tips and we need your help. If you have any ideas or comments please let us know.

In order to serve you better, let us know if there is a specific topic you would like to hear about or have explained in Tech Tips.

If you have any hints or tips from your experience of working with Arachnid Games or Dartman that you would like to share, send them in. Thanks.

HOW TO REACH US:

HAVE A TECHNICAL QUESTION OR PROBLEM? HAVE A TIP TO SHARE?



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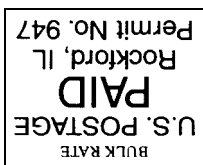
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Please Forward to your Technical Staff and Dartman Users



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