# SYSTEM OVERVIEW

The Datasmith Payroll System is designed to provide all the commonly needed payroll functions for a small to medium-sized company. It allows considerable flexibility in the handling of pay amounts and deductions and produces reports containing the information necessary to complete most government forms.

The system is "batch-oriented", which means that the calculation of payroll for the entire company takes place in a single job. The system also allows the operator to go through a complete payroll cycle for only one employee, or a small group of employees to facilitate early or late checks, corrections, bonus payments, or to simply ease the payroll processing workload. It contains all the modules needed for "before-the-fact" operation, which means that the programs calculate all payroll information before employees are paid. It also includes Manual Check entry for "after the fact" operation, which means recording payroll information after employees have been paid.

The operator selects the subject payroll (which may represent a client, employer, pay period, or other division) from a library by either an operator-assigned code or an operator assigned name. As new payrolls are added, the selection list is automatically sorted.

You can calculate payroll weekly, every two weeks, twice monthly, monthly, or any other period which is legal in your state with the same set of programs. You specify the pay period at the time you enter the Company data for a given Payroll. Once a payroll period is specified, it applies to all employees in the master employee file and is used as a basis for calculating withholding taxes. If you use more than one pay period, paying some employees weekly and others monthly (for example), simply establish a "weekly" disk or directory and a "monthly" disk or directory.

> The system may be used for any number of different pay periods and/or
> different companies as long as each payroll is on a different disk or directory.

Employees may be paid on hourly or salaried basis, or on commission, or by some mixture of these methods. Pay data may also be read from a text file prepared by a spreadsheet, database, word processor, or other system: data from this source may also be used to supplement data entered by other methods. Regardless of the method of original entry, the operator has the capability to edit all pay data. with several different pay classifications being accumulated separately. Recurring deductions, such as insurance contributions, are automatically deducted from the employee's pay every period. You may also specify non-recurring deductions or pay amounts in any period, or override the "normal" deduction or pay amount. Payments and deductions can individually be included or excluded from Federal, FICA, Medicare, State, Local, and/or Other taxes; and individually included in or excluded from Unemployment wages. This allows handling mixtures of recurring and

nonrecurring payments and deductions in conjunction with the regular payroll as accurately as possible. The system will also maintain a loan balance to handle pay advances or other employee loans, and can automatically enforce a limit on other deductions.

Calculation of withholding taxes is performed by the **percentage method** of withholding, using **annual tax tables**. This method, as defined in Federal <u>Circular E, Employer's Tax Guide</u> determines withholding taxes by converting the taxable income for the period to an annual amount, figuring the tax on the basis of the annual tax table, and then prorating the tax back to the payroll period. This method was chosen because only one tax table is needed and any payroll period can be calculated just by knowing the number of pay periods in a year. It is considerably more accurate than wage bracket tables since it figures the tax to the nearest cent. The results obtained will vary slightly from wage bracket amounts.

State and local withholding taxes are calculated by a program which is customized to include tax calculation modules for specific taxes and tax authorities. These modules either follow an "approved" formula published in the Employer's Tax Guide for the taxing authority, or qualify as an "acceptable alternate method". Consult the State Tax Notes which came with your Payroll system (select your state from Tax Table Maintenance and press {F3} to view State Notes) for documentation on any unusual features peculiar to your area. **Unless otherwise noted, the State and Local tax routines delivered with DATASMITH Payroll follow the Federal model for withholding.** This means:

1. Your state provides rules for determining the number of State Exemptions (similar to the Federal W4 rules). Each State Exemption is multiplied by a fixed amount and subtracted from gross pay before any withholding is calculated. The fixed amount appears on Line 16 of the DATASMITH Tax Table for each filing status and may be changed by the operator to match current regulations.

2. Your state uses "Single", "Married", and "Head of Household" filing statuses for determining which table to use for calculating withholding. It is not necessary that the rates for these three statuses be different. If a distinction such as "Filing separately" changes the tax due, your State does <u>not</u> fit the Federal model: State Tax Notes will accompany your Payroll and describe how DATASMITH Payroll handles your particular State.

3. Your state follows the Federal laws governing tax-exempt payments and before-tax deductions (such as for 401K or other Pension plans or "Cafeteria Plans").

4. Your state tax is based on gross taxable pay and not the Federal tax or Federal withholding amount.

Using DATASMITH Payroll with State taxes which do not fit the Federal model is usually no more difficult than for "normal" State taxes, but you need to be aware that there is usually special information required in the Employee record to calculate taxes correctly for

these states <u>over and above</u> what is required to calculate Federal withholding. Your State Tax notes will explain what any special information is and how to enter it from the information published by your state.

In some special instances, you may not wish to calculate Federal, State, Local, or Other taxes according to standard tables. In this case alternate methods of calculating withholding may be selected for any employee (as explained in Chapter 5, "Employee Data"). The alternate methods include:

> 1. Extra amount in addition to "Regular".
> 2. Constant amount.
> 3. Fixed percentage.
> 4. Extra percentage in addition to "Regular".

These alternate methods are useful in cases where the standard methods do not accurately reflect tax liability, as when an employee has two jobs or a working spouse.

DATASMITH Payroll relies on user-maintained tax tables to determine applicable tax and deduction rates while performing its withholding calculations. You have complete access to the information in these tables and can change them yourself any time it is necessary. You will not normally need to change the tax calculation <u>program</u> itself, unless there has been a change in the calculation <u>method</u> to be used.

## ABOUT FILES

All disk-based computer systems store information on disk in named collections of data called "files." You should be familiar with the concept and handling of disk files before attempting to use the Payroll system. You can find this information in the documentation that came with your computer.

The Payroll System uses three primary files, all of which are expected to be found or created in the Data Directory which you specified for the current payroll system, which is identified above the Main Menu after the heading "Program expects Data in..". Your employee master file, named **MASTER.PAY** contains all the information on your company and employees for the current period, along with information on the last payroll period calculated and year-to-date totals. This file's information is changed every time you add or delete employees, change employee information, or calculate a new payroll period.

Each time you add an employee to the payroll, the new information is written to the end of the master file. The employees are stored in the physical order in which you entered them. However, the payroll system needs to quickly find an employee given only his or her employee number. To do this, the system maintains a special file named **KEYFILE.PAY** to assist in quick access. This file simply contains a list of employee numbers in numerical order paired with the location of the employee's data in the master file. This file can be re-

created from MASTER.PAY at any time using the KEY FILE selection of the Initialize and Utilities menu.

Every time the payroll file is initialized, an additional file is created that contains the contents of MASTER.PAY <u>before</u> the initialization. This file is necessary for historical records and can be used as a backup file, since it is in the same format as the master file. The file name always begins with the letters "PR", ends with the suffix ".PAY", and contains the date the pay period ended in the form MMDDYY.

Your data disk must also contain the tax table, named **TAXTBL.PAY**. This file contains federal, FICA, Medicare, State, Local, and Other tax rate information for married and single employees, and is used every time payroll is calculated. Through the payroll utility program, you have the ability to review or enter tax tables as required.

There may be other files depending upon your use of optional features. **ALTKEYS.PAY**, or **AKn.PAY** if created, contain the same information as **KEYFILE.PAY**, except arranged in one of several alternate sequences such as alphabetically, by department, by social security number, or by check number. **JOBCOST.PAY** and **JOBNAMES.PAY** are used by the job costing part of the system, and **JF{mmddyy}.PAY** is a Journal File for the period ending mm/dd/yy.

Note that all data files used by the payroll system have the file extension '.PAY', indicating that they are for use by the payroll programs.

## TIPS FOR USING FILES AND DIRECTORIES

1.  Learn how to display directories, copy files, erase files, and repair the directories on your system. These operations are necessary when doing routine file maintenance.

2.  Always make sure the date and time used by your system are correct. Your computer records the date and time each time a file is created or changed. It is often useful to know when a file was last changed.

3.  Always make sure that your system's VERIFY flag is ON. This simple step will increase your hard disk subsystem's reliability by a factor of 1000!

    **WITH VERIFY ON:**
    Whenever a program asks your operating system to write to a disk file, the data will be read back from the disk and verified against the image of what was supposed to be written in memory. If there is a discrepancy, your operating system will automatically re-try the operation many times. If a bad sector is encountered, Your operating system will even try to allocate a different sector to recover from the problem. Since it is well established within the disk drive industry that 999 out of 1000 errors **are recoverable** by this method, it is virtually assured that your program will continue with no loss of data.

    This entire process proceeds at machine speeds, and the operator is usually unaware that any recovery is taking place: Your operating system issues a message only after many retries are unsuccessful.

**WITH VERIFY OFF:**

Whenever a program asks Your operating system to write to a disk file, the data is <u>assumed</u> to be correctly written (but is NOT CHECKED). If there is a discrepancy, it will not be discovered until the program tries to use the data again. Since the "good" data is no longer in memory, recovery always involves re-entering data. Your operating system will <u>not attempt</u> to recover the 999 out of 1000 errors which are recoverable, because it will <u>never notice that these errors have occurred</u>.

PS: In all fairness to those claiming that VERIFY OFF speeds up your machine, turning VERIFY OFF <u>will</u> save you approximately .01 seconds every time the machine writes to disk, or about 1 second of unattended machine time per 100 employees processed: we think you'll more than make up for at least ten years of the speed difference each time you avoid a problem.

You can check the status of VERIFY by typing (from a DOS prompt):

<div align="center">VERIFY</div>

Your operating system will respond:

<div align="center">VERIFY IS {ON|OFF}</div>

To turn VERIFY ON, simply type (from a DOS prompt):

<div align="center">VERIFY ON</div>

You can add the command "VERIFY ON" to your AUTOEXEC.BAT file in order to assure that this important feature is active during processing of your critical payroll data. Application notes describing specifically how to turn VERIFY ON in Windows 95 are available on our web site:
<div align="center">**http://www.datasmithpayroll.com**</div>

4. If you use disk cacheing programs such as SMARTDRV, NWCACHE, etc., or operating systems with built-in caching such as Windows 95, always make sure that the feature called "write-delay caching" is OFF. Another way of saying this is that you should make sure you DO use "write-through caching". Write-delay caching makes your system extremely susceptible to power "glitches", static discharges, and other disturbances. Worse, the response to these disturbances will almost always be irrecoverable data loss. You are especially exposed to this problem if you are operating Windows, Windows 95, Windows NT, OS/2, or any similar system without an uninterruptable power supply. Application notes describing specifically how to turn Write Delay Caching OFF in Windows 95 are available on our web site.

If your system's file manager makes an error while running <u>any program</u> (not just payroll) which writes to disk because write delay caching was ON or VERIFY was OFF, you could potentially lose data or programs from anywhere on your hard disk drive, even if the affected programs or files were are being used at the time the error occurs.

# PAYROLL CYCLE CHECKLIST

The recommended procedure for an entire pay period is as follows:

IN-HOUSE PAYROLL ("BEFORE THE FACT" MODE):

1. Collect time cards and other payroll data and fill out a "data input form", printed by the Master Report printing program. **Enter** the payroll data using Periodic Entry.

2. Print an "**Hours Listing**" and check for accuracy.

3. Do the **Calculations**.

4. Print a "working" Payroll **Report**, or display the payroll report on the screen, double-checking to see that calculated amounts and Company Totals appear reasonable, and that the correct number of people got paid.

5. Print **Checks**.

6. Print a Payroll **Report** for your permanent records. You will find the information you need for accounting and tax purposes in the Company Totals (and/or Department Totals, if requested). You may also want to print a Check Register for easy reconciliation, although check numbers also appear in the Payroll Report.

7. **Initialize** the payroll file for a new period. This process adds current data to year-to-date data permanently and zeroes current amounts in preparation for the next pay period. A backup copy of your uninitialized payroll file is automatically saved for you during Initialization. Begin the next payroll period with Step 1 above.

PAYROLL PREPARER OPERATION ("AFTER THE FACT" MODE):

1. Collect payroll data. Entry can usually be made directly from a form provided by the client. If not, fill out a "data input form" printed by the Master Report printing program. **Enter** the payroll data using the **Manual Check** selection.

2. Print a Payroll **Report** for your permanent records. This report contains totals which can be used to audit the data entry process. You will find the information you need for accounting and tax purposes in the Company Totals (and/or Department Totals, if

requested). You may also want to print a Check Register for easy reconciliation, although check numbers also appear in the Payroll Report.

3.  **Initialize** the payroll file for a new period. This process adds current data to year-to-date data permanently and zeroes current amounts in preparation for the next pay period. A backup copy of your uninitialized payroll file is automatically saved for you during Initialization. Begin the next payroll period with Step 1 above.

## MIXING MODES TO HANDLE EXCEPTIONS:

In "Before the Fact" mode, you can use the Manual Check facility to override the results of calculation to handle nonrecurring special cases without the need to modify the employee record.  Manual Check can be used to change the amount of pay, any deductions, or taxes.  If a check is issued outside the normal system (as in the case of a sudden termination), you can document the transaction and make the recorded figures match the check exactly by using Manual Check. To prevent the payroll system from issuing a duplicate check, simply use Manual Check to enter the already-issued check number: this will cause the Check Printing program to assume the employee has already been paid.

In "After the Fact" mode, you can use Calculate to determine pay and taxes before a check is issued in order to provide advice to the party writing the check. You can also cause the system to actually issue a check by omitting the check number (or entering zero for the check number).

In either mode, you can back up to the previous step of the process to make corrections at any time before you Initialize the pay period.  Even after you Initialize, you can restore the pay period (using the Un-Initialize utility) at any time before the next pay period is started without losing data or corrupting your totals.