



# CTI OpScan System Quick Reference Guide



## General Information

- Hardware: NCS OpScan 3
- Software: examSYSTEM II
- Location: Center for Teaching Innovation (CTI), Educ 208, 885-2121 (cti@uidaho.edu)

Please schedule the Scantron through the Help Desk 885-2725 ([helpdesk@uidaho.edu](mailto:helpdesk@uidaho.edu)) or through the ITS Scheduling Desk 885-2127 ([schedule@uidaho.edu](mailto:schedule@uidaho.edu)).

The following NCS forms are required when using the Scantron Equipment:

- Header Form
- Key Answer Sheet (same NCS form as Student Answer Sheets)
- Student Answer Sheets (Note: Answer Sheets containing areas for the students to fill in their names are recommended for use with this system.)

Please refer to inside jacket of the cover page of the examSYSTEM II User's Guide for NCS form samples and basic instructions for filling these forms out.

## Administer a Test using the NCS Forms

- Test Version – **blank or A, B, C, and D**. If you give multiple versions of the same test, have the students fill in the Test Version here.
- Identification # – this should be a **unique number** for each student from 1 to 10 digits in length containing **no blanks or dashes**. This must be **left justified**.
- Answers should be filled in with a **#2 pencil** (Pen marks will be graded inaccurately—if at all.)
- Changes to answers should be cleanly erased. If the Scantron reads two answer marks for a question, it will always mark the question wrong.

## Complete the Header Sheet for a Test

You are required to fill out the blue side of the Header Sheet. The green side is optional.

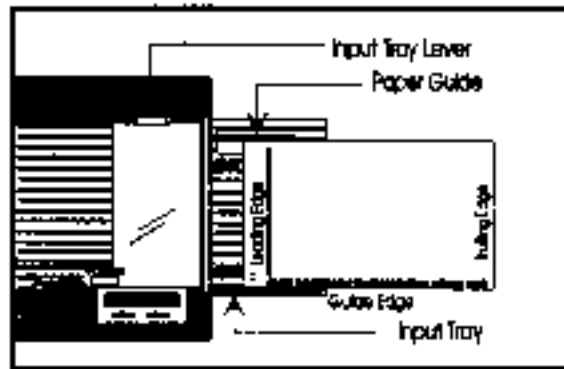
- Test Name – **anything** – left justified
- Test ID – **any 6 digits** (i.e. 100200)
- Sub Tests – **01** (Number of keys used to grade an Answer Sheet. This should be **01** even for tests with several versions because each answer sheet corresponds to just one key.)
- Formula Scoring – **no** (adjusts for guessing – not recommended)
- Printer – **off** (there is no printer attached to the Scantron at this time)
- Versions – **no** (not supported by the software)
- Performance Assessment – **no** (no supported by the software)

## Complete the Key Sheet for a Test

- Test Version – **blank or A** (B, C, and D may not be selected for the Key Answer Sheet. If you have multiple versions of the same test, you may use the Test Version ID to identify the version on the Student Answer Sheets, but you may not fill this in on the Key Answer Sheet.)
- Identification # – |1| ##|  
Place 1 in the left most column (the first column will always be 1 equaling the number of keys for the test), followed by a blank space, followed by ## (the number of questions on the test).
- Correct answers should be filled in for each question on the test—one answer per question. (Unfortunately, if two or more answers for a question are selected as correct, all answers are marked correct for that question.)

## Batch the Forms

1. Arrange the forms so that the Header Sheet is first, followed the Key Sheet, followed by the Student Answer Sheets. If you have given two or more versions of the test to prevent cheating, sort the forms by Test Version (A, B, C, D, . . .). Each Test Version will be treated as a distinct Test requiring a separate Test ID number and should be fed into the Scantron using a separate Header and Key.
2. Place the forms into the Scantron using the following guidelines:
  - Place your forms into the Scantron (**Header** on top, **Key** in the middle, **Student** forms on the bottom)
  - Place each form's **bar codes toward the front** of the Scantron, **left-justified**.
  - Press the "**PRESS TO LOAD**" button to insert them correctly.
  - Place no more than **50** forms into the Scantron at one time.



## Scan the Forms

1. Login to the computer using your CTI NT **userid** and **password** (contact a CTI staff member to obtain this)
2. Enter your **userid** into the CTI sign-in screen and press the **Sign in** Button
3. Run the Scantron software by selecting:  
**Start > Applications > examSYSTEM II – Scantron**
4. Select **Score and Store** from the examSYSTEM II Home Page
5. Enter a **Data Set Name** to store your data and select **Next>>**
6. Make sure your forms are loaded correctly into the Scantron
7. Select the **Start Scan** button
  - **Accept** – select to accept the header and key forms
  - **Resume** – select to resume after an error has been detected or after the Scantron has run out of forms and you have loaded more into the input hopper to be scanned.
  - **Stop** – select when the scanning is done and you are ready generate the reports.

## Errors While Scanning

- The Scantron feeds in the forms one at a time and stops whenever a problem is detected. If the error is in the way the form has been filled out, the Scantron will spit the form with the error into the output hopper (left side of Scantron) and the software will identify the field containing the problem. Identify the problem, fix it using an eraser and/or a #2 pencil, and return the form into the input hopper (right side) to be scanned again. Typical problems with the student forms:
  - A blank space occurs in the student id
  - The student id as been right justified rather than left justified
  - A pen rather than a #2 pencil was used
  - A column was jumped or doubled up on
  - The form has stray marks or incomplete erasures
- Once in a while a form will jam in the Scantron. The two center bars can be lifted up to help in pulling the form out of the Scantron. Make sure these are pressed down so that they snap back into place before continuing to scan. Typical problems with the forms that cause jamming:
  - Bent forms
  - Forms loaded without pressing the "**PRESS TO LOAD**" button.

## Print the Results

ExamSYSTEM II calculates raw scores, percentages based on one point per answer (if each answer is worth more than one point, you will need to import the scanned results into Excel to compute this calculation), mean, standard deviation, and other useful calculations.

1. Select **Reports...** to generate the reports.
2. Select the **Data Set Name** so that it appears under the **Data Sets Selected** title and select **Next>>**
3. Select each report you are interested in, select **Next>>** to preview it, and select the **printer icon** displayed at the top of the preview to print the report to the CTI's printer. Reports available:
  - **Individual Test Results** – shows raw score for each student (one point per correct answer).
  - **Individual Item Response** – shows individual student responses for each answer as well as the raw score.
  - **Item Analysis** – allows you to analyze each question and evaluate the test difficulty.
  - **Relative Frequency Distribution** – displays a bar graph showing the percentage of students at each possible raw score.
  - **Absolute Frequency Distribution** – displays a bar graph showing the number of students at each possible raw score.
  - **Test Score Distribution** – compares raw scores to various types of standard scores and distributions:
    - Z-score – standard score based on raw scores, a standard deviation of 1, and a mean of 0.
    - T-score – standard score based on raw scores, a standard deviation of 10, and a mean of 50.
    - Stanine – standard score based on a 9-point scale.
4. Select **Home** when you are done printing all the reports you need.

## Export the Test Data to an Excel Spreadsheet (Optional)

You may wish to export your data to a Microsoft Excel Spreadsheet. Excel gives you the ability to calculate test score percentages using formulas and to merge your test scores for a semester into one grade book file.

1. Select **Data Set Management** from the examSYSTEM II Home Page
2. Select **Export Test Data Sets**
3. Select the **Data Set Name** so that it appears under the **Data Sets Selected** title
4. Select **DLM Tab Delimited**
5. Indicate *location* (A:\ for floppy, E:\ for Zip) and *filename.dlm* you want to save the exported data to
6. Press **Export** to export the data
7. Export saves your data into a .dlm file. Open this file using Microsoft Excel by navigating to its location and selecting **files of type: All Files (\*.\*)**. An import wizard will help you import your data correctly. Select **Delimited, Tab,** and **Finish** when prompted. You need to keep only a few of the columns imported into Excel. Delete all columns other than: **First Name, Last Name, Student ID,** and **Test Scores.**
8. Select **Save As** to save the imported information into an Excel Spreadsheet file.
9. Instructions for using Excel's advanced features such as formulas and merging techniques are outside the scope of this Quick Reference Guide. Contact a CTI staff member for assistance with these techniques.

## Delete the Test Data from examSYSTEM II (Optional)

The Center for Teaching Innovation (CTI) has a steady flow of faculty, staff, and students. CTI is accessible with a vandal card during evenings and weekends and the Scantron data sets are accessible to all who enter the lab. We recommended you delete your data sets once you have printed out the reports you need and have exported your data to an Excel spreadsheet (optional). To delete your data set:

1. Select **Data Set Management** from the examSYSTEM II Home Page
2. Select **Delete Test Data Sets**
3. Select the **Data Set Name** you stored
4. Press **Delete** to delete the data

## End Your Session

1. Insure all work has been saved
2. Exit all the open applications
3. Remove any personal floppies or ZIPs from the computer
4. Gather up all your Scantron Forms
5. Select **Start > Shutdown > Logoff Userid**