



Frequently Asked Questions

This bulletin reviews many frequently asked questions by customers, along with learned experiences, regarding the ENCAD T-200/T-200+ printer.

NOTE: For printer setup, printer calibrations, general printer operations, cartridge performance/warranty issues and routine maintenance please refer to the on-line training guide and Technical Bulletins 1, 2, & 4.

1. What are the output page length limitations from the respective drivers for the T-200+ printer:

Windows Driver – 400” (10.16 meters)

ADI Driver – 1200” (30.48 meters) - 1 roll

NOTE: R12/R13/R14 drivers have a 600” (15.24 meters) limitation

HDI Driver – 1200” (30.48 meters) - 1 roll

2. When running the Servo Cycle Test what is the normal max PWM value (M=value) when testing general carriage transfer or evaluating bushing performance?

Running the fast servo cycle test (i.e. for 10 cycles) on the new T-200+ printer with cartridges + caddies installed (+ bushing clips) will have a value range typically between 230 and 272 (M = value) for the older Buehler motors; for the newer Dunker motors the range should be 200 to 240. Anything value higher than M=285 indicates printer cleanliness is in question or the carriage bushings are dirty (lint underneath) or damaged. A printer carriage axis error will trip at a count of M=300. If the slow PWM test is run the count should be >100 counts lower, maximum PWM values (M = value) will typically fall between 100 and 150 for most printers.

NOTE: the fast servo cycle test drives the carriage approximately 10-15% faster than the normal printing carriage speed. As values approach the M=285 mark this does not indicate the true ‘normal printing’ PWM range (typically ~20-25 counts lower).

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3. Is AutoCAD 2006/2007 driver support available?

Yes, AutoCAD 2007 may use HDI driver version 9.0; AutoCAD 2006 may use HDI driver version .819. Drivers may be obtained from the ENCAD SUPPORT website:

<http://www.encad.com/Support/Printer%20Reference/T200.asp>

NOTE: Please refer to Technical Bulletin 5 for correct driver loading and configuration instructions. Please note certain output features from the AutoCAD Light software versions may not be available.

4. What is the printer's throughput mode vs print pass selection?

Color & Mono/Pass	DPI	SFPH
1 Super draft	600x300	200 (18.58 smph)
1 Draft	600x300	113 (10.50 smph)
3 Normal (default)	600x600	73 (6.78 smph)
4 Best	600x600	55 (5.11 smph)

Four Black/Pass	DPI	SFPH
1 Super draft	600x300	567 (52.68 smph)
2 Draft	600x300	230 (21.37 smph)
3 Normal (default)	600x600	206 (19.14 smph)
4 Best	600x600	158 (14.68 smph)

5. What is faster, 4BGray or 4BMono?

4-Black Mono is slightly faster.



NOTE: Some software CAD packages may not support 4-Black mono operations when printing through the Windows driver; however 4-Black Gray and Color typically do function correctly. Refer to item #14 below.

6. Is there a printer Menu Tree or Flow Chart (can be found in more detail in the Reference Guide found on the User/System CD-ROM)?

T-200+ MENU TREE

In the text that follows, items in *italics* indicate that selecting the option gives access to a menu with further options. Items shown in **bold** are the default option.

Shortcut Menu

Cut Cuts media

Prime Prints the prime pattern.

Feed Media Feeds media backward or forward.

Access Cartridge Moves cartridges to the center of the platen for replacing cartridges and the cutter.

Pause Pauses printing until the Select button is pressed.

Clean (C, M, Y, K) Causes the selected cartridge to expel ink into the service station.

Main menu at a glance

Main Menu

Setup Menu Print Modes

Paper Options

HP-GL/2 Options

User Setup

Ink Options

Utility Menu Color Calib

Db Calib

Paper Calib

Display Settings

Print Settings

Service Menu

Open Jets

Setup menu at a glance

Setup

Print Modes

Color Mode **Color**, 4BGray, 4BMono, 1BGray, 1BMono

Quality super, draft, normal, best

DPI 300, **600**

Paper Options

Supply Sheet, **Roll**

Media **All**, US Eng, US Arch, ISO A, ISO B,

Special, MET OVER A, Graphics, US All, Met All

Margins **Normal**, Expanded

Auto-Cut **On/Off**

Save Media **On/Off**

Auto-Wipe **On/Off**

HP/GL2 Options

Palette **HP-GL/2**, AutoCAD



Control Software, Printer
Rotation 0, 90, 180, 270, **Auto**
Ink Reduct **0%**, 12.5%, 25%, 37.5%, 50%
Nest Enable On, **Off**
Nest Time **30 sec.**, 1 min., 2 min.
Reprints **0** - 99
Ink Limit Off, **On**

User Setup Menu
Sel User 1-8, **1**
Save User 1-8, **1**
Units **English**, Metric
Language **English**, German, French, Italian, Spanish,
Portuguese, Japanese

Init Settings
Print Settings
Ink Options Menu
Ink Preheat (C, M, Y, K) -3...+4 for each cartridge, **0** is the default
Dry Time **0**, 0 to 1 minute in 5 second increments, 1 to 60 minutes
in 1minute increments
Interval **30 sec**, 10 sec, 2 min, 1 min

Utility menu at a glance

Color Calib
Print Test
C, M, Y Vert
C, M, Y Horiz

Db Calib
Slow Db Test
Slow Db 0, 1, 2, -2, -1
Fast Db Test 1-12
C, M, Y, K Fast Db
Color Db Test

Paper Calib
Calib XY
Paper Axis Test
Paper Axis

Display Settings On, Plot
Print Settings

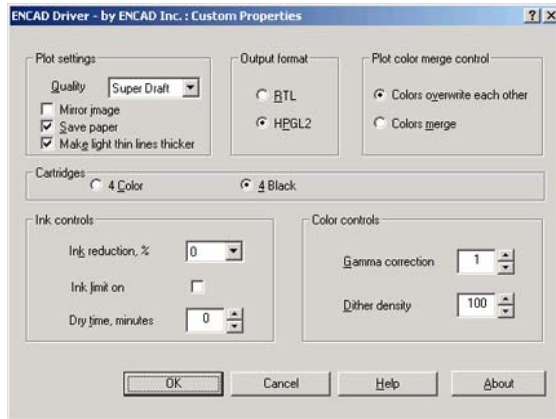
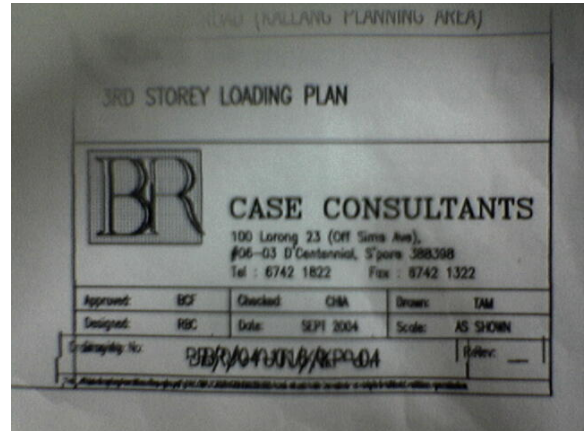
Service Menu
About
Disp Cart. Info
Print Cart Info
Test Print
Diag. Menu

Open Jets
C, M, Y, K #### On, Off
Print Jet List
Clear Lists

7. At the ADI/HDI driver, is the HPGL/2 or RTL output setting preferred?

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Normally the HPGL2 mode is used by customers most of the time. However, if a problem like the double-image print symptoms shown in photo at right, is observed with HPGL/2 output then switch from HP-GL/2 mode to RTL output mode (Raster mode) to correct. Also switching to an alternate dithering/diffusion patterns has been found to correct the appearance of degraded print output (i.e. bitmaps/gradient images) as well.



8. Is there a reliable Macintosh solution available for the T-200/T-200+ printer?

Yes, as far as we know, Microspot reportedly has a good RIP solution (Microspot X-RIP; approx. \$550 USD) to support Mac OS >10.2 users on the T-200+ printer....many dealers/customers have stated the MicroSpot X-RIP works great though this has not been verified by Kodak Support.

NOTE: The Kodak Edition RIP does support MAC and PC (though more expensive; \$900 USD) and is a proven solution for most printing applications. At this time there is no information available regarding AutoDesk's REVIT program print capability from the Microspot RIP:

http://www.aecbytes.com/review/Revit_6.htm.

Microspot RIP software information:

<http://www.microspot.co.uk/products/techInfo/xrip.htm>

9. Is there an ink/media counter on the printer?

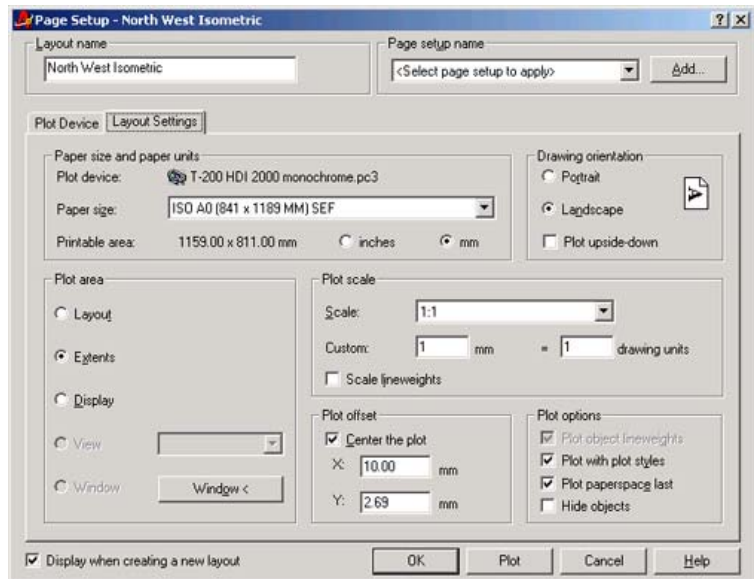
The printer does not have a plot-by-plot counter, but it does track total media usage. By navigating to '**UTILITY MENU - PRINT SETTINGS**' and hitting the **SELECT** button, all operating system information will be printed out, including the cumulative media used information in the following format:

i.e. Media Printed: 26.5 ft. 79.7 sq ft.

10. How come line thicknesses in the CTB are not recognized for both for RTL and HPGL file output?

The CTB line thickness values are recognized if driver configurations are properly set. Things to check:

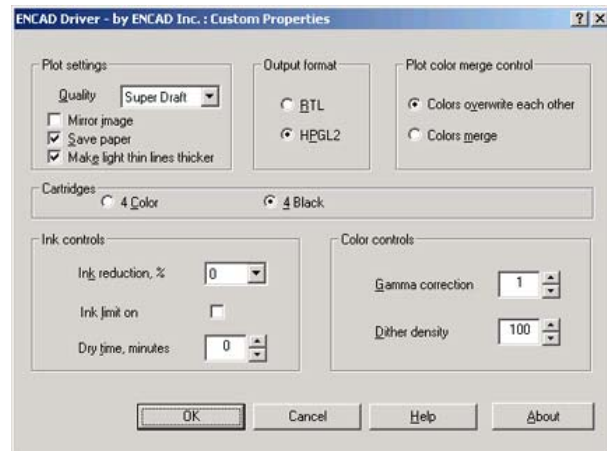
- Be sure the "plot with plot styles" check box is set in the plot configuration dialog (go to Page Setup – Layout).
- Check AutoCAD's plot preview. Does line thickness from the CTB show in the preview? It should. If not, then check the CTB and drawing settings for this entity.



11. How come multiple copies do not print in the HPGL mode?

NOTE: AutoCAD does not support multiple copies plotting if plotting to a file, but this is not typical workflow.

Plotting multiple copies in HPGL2 mode does not work, this is a known issue and will not be fixed. It is advised to re-print multiple copies using the re-print command (up to 99 copies) under the printer's HP-GL/2 menu if this is desired. Multiple copy function does work in the RTL mode; driver sends a repeat of complete plot data for each copy.



12. Why does applying screening to less than 50% have no effect? (i.e. 25% screen looks same as 50%).

Engineering has tested both RTL and HPGL modes by plotting sample drawings using AutoCAD sample .ctb files for 100%, 50% and 25% screening. In all cases the printed output showed the proper effects of the screening from the .ctb files.

Things to check:

- Be sure the "plot with plot styles" check box is set in the plot configuration dialog.
- Check AutoCAD's plot preview. Does screening from the CTB show in the preview? It should. If not, then check the CTB and drawing settings for this entity.

13. When printing Acrobat 7.0 pdf files sometimes the colored lines do not print or other imaging problems occur, why?

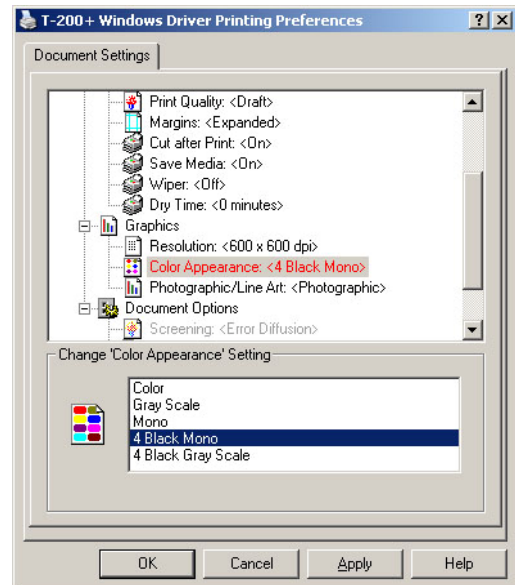
Software development has determined that the latest version of Acrobat 7.0.5 or higher must be installed to support pdf printing (this same problem may be present in the universal ENCAD Windows driver – refer to item #14 below). If upgrade is not possible or problems persist, it is suggested to either print version 5.0/6.0 pdf files or obtain another file format for processing through the ADI/HDI driver.

14. When printing through the Windows Driver (i.e. version 6111) how come some of the output features do not work?

Some Windows-based imaging programs and/or CAD Software programs may not support certain output modes (i.e. 4-Black mono operations when printing through the Windows driver; however 4-Black Gray and Color may function normally).

NOTE 1: If attempting to print and rotate PDF files please refer to Technical Bulletin 6.

NOTE 2: As an option, the V/R RIP (free from Kodak Support) is an alternative 'super-driver' for use by customers – please contact technical support for more information.

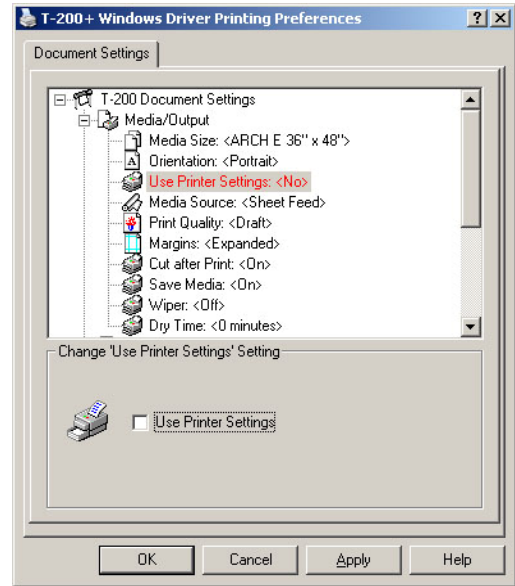


Driver Tests:

a). Now, it is possible to bypass a Windows driver software restriction by making all settings at the printer and then giving the printer full control; normally the windows driver selection 'Use Printer Settings' is not checked (thereby allowing

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the software driver to control and supersede anything set at the printer). 'Check' this *Use Printer Settings* box giving the printer full control, the only catch though is now all settings need to be made at the printer, including: page size (i.e. Arch D), color mode (i.e. 4B mono), margins (i.e. expanded), print mode (i.e. Draft), cut mode (i.e. Off) etc., etc. at the printer. After the printer menu's are set up, go to Setup Menu - User Settings - Save User (ensure #1 is selected) and select Save (or Ok) to lock in changes (otherwise if the printer is powered off all the changes will be lost). Select Print (at Windows driver) and verify 4-Black output is obtained.



b). As a 2nd test, to compare software compatibility, run a print through another imaging software (i.e. Microsoft Paint for example; select START - PROGRAMS - ACCESSORIES - PAINT to launch program). In addition, several shareware CAD-like programs are available on the web, such as MaxView and E-Drawings.

15. What are the connectivity options to the T-200/T-200+ printer?

There are three (3) different ways to connect the printer to the host computer:

- 1). Parallel Printer cable (IEEE 1284 Standard). Please note that parallel connections may cause print hesitations and erratic/slow carriage movement due to the slow handshaking rates between the computer's parallel port and operations system (this has become an issue ever since the release of Win 2000 and is normally the reason why many customer's have moved to Ethernet).
- 2). Direct Ethernet; using a Crossover Ethernet Cable (Cat 5) and Print Server
- 3). Indirect Ethernet; use two (2) standard Ethernet Cables (Cat 5), a HUB/Switch and Print Server

Hardware Connectivity Order:

Computer - Ethernet 'Crossover' Cable - Print Server - Printer

or

Computer - Crossover Cable - HUB/Switch - Crossover Cable - Print Server - Printer

NOTE 1: While ENCAD/KODAK offered the SEH Intercon Print Server in the past it is no longer available; instead the DP-301P+ print server has been reported to work well. The DP-301P+ print server can be obtained via several web sites for approximately \$60 USD. Example site below:



<http://www.dlink.com/products/?sec=0&pid=322>

NOTE 2: For assistance in networking a printer, using a print server, please refer to the T-200 training guide, page 14-16.

<http://www.encad.com/Support/Training/index.asp>

16. What is the proper sequence for installing a cartridge and caddy?

- a). Remove cartridge packing materials and blue/yellow tape from Cartridge bottom. Install cartridge into carriage and wait 1-2 minutes before installing Caddy.
- b). Remove blue tape from Caddy vent.
- c). Attach caddy to cartridge by firmly pushing onto cartridge septum (if installing caddy onto cartridge while in the carriage assembly ensure the cartridge's lower edges are held securely and press assemblies together).

CAUTION: Do not press down onto carriage with full force or damage to carriage assembly may occur. Verify the caddy is completely seated onto the cartridge (minimal gap between assemblies should be observed, i.e. <0.5 mm). If necessary, remove assemblies from carriage and perform binding/joining of two assemblies away from carriage.



- d). Activate Color Test with new heads to initiate ink flow. If necessary, blot bottom of cartridge/caddy assembly with wet towel. Refer to Technical Bulletin 2 (pages 2 & 3).
- e). Activate Prime pattern, evaluate jetting. Perform 'Clean' pattern for any observed misfires; run second Prime pattern (nozzle test) to evaluate.
- f). Review manual jet bypass procedures, in User Manual as necessary, for bypassing any clogged or mis-directed jets.
- g). Calibrate the printer (4 step process); refer to Technical Bulletin 2 (page 5).