www.isys-group.com
866.415.iSys

iTerra Lite User Guide

Table of Contents

I | GENERAL

About this Manual:

Please read this manual before using the printer, in particular the Installation and Operation Chapters, and the "Regular Maintenance" section in the Maintenance Chapter.

Pay special attention to warnings, cautions and notes. The following conventions are used in this manual:

CAUTION: Indicates possible equipment damage unless procedure is followed correctly.

NOTE: Indicates a general rule for a procedure, or an exception to a rule.

II | SPECIFICATIONS

FUNCTIONAL:

Print Speeds	Up to 1" per second (print mode and data dependent)
Print Technology	HP Thermal Inkjet
Print Quality	5 Print modes (3 Continuous)
Effective Print Width	Maximum of 8.5 inches in continuous mode
Emulation	PCL3 + GUI
Print Driver Support	Windows 2000, XP
Connectivity Ethernet	IEEE 1284-Centronics™ (std), USB, 10/100 baseT
Optional	USB (external), 10/100 baseT Ethernet (Internal), Rack mount tray for 17", 21"-24" or 30" depth racks, Front mount input trays for Rack and Desktop printer versions, Bottom mount input tray for in rack mounting, Output media trays for Rack and Desktop printer versions.
Certification	FCC Class A, CE
Paper Handling	Front loading media guide supports 8.75 inches (width) for continuous printing and 8.5 inches for sheet
Features	LCD front operations panel, Auto sensing TOF, Desktop or Rack mount, User replaceable print engine, Auto-sensing and switching power supply
Media Types	Continuous fanfold Cut sheet
Dimensions	19"w x 14.25"d x 7"h (uncrated) (48.26 cm x 36.25 cm x 17.8 cm)

Weight	Desktop	32 lbs (15 kg)
		43 lbs (20 kg) crated or shipping
	Rackmount	42 lbs (19 kg)
		53 lbs (24 kg) crated or shipping

Inkjet Cartridges:

Type	Black – HP 56 (C6657AN) Tri-Color – HP 57 (C6656AN)

Printer Resolution

Continuous	300 x 300 dpi - Fast Draft 600 x 600 dpi – Fast Normal & Normal
Cut Sheet	300 x 300 dpi – Fast Draft

600 x 600 dpi – Fast Normal, Normal & Best
1200 x 1200 dpi – Maximum dpi (Photo)

ELECTRICAL:

Interface Standard: Centronics™ IEEE-1284
        Optional: USB (1.1) , 10/100 baseT Ethernet network

Power Consumption   63 watts maximum peak

Power Requirements
      Input voltage   100 to 240
                      VAC (+/- 10%)

      Input frequency   50 to 60 Hz
                      (+/- 3 Hz)

PHYSICAL:

Dimensions

Desktop	Height	7.0"
	Width	17.5"
	Depth	14.25"
	Weight	32 lbs
Rack mount	Height	7.0"
	Width	19" (with Rack Tray)
	Depth	14.25"
	Weight	42 lbs

OPERATING ENVIRONMENT:

Maximum operating conditions
      Temperature   5 to 40 degrees C or 41 to 104 degrees F
      Humidity   15 to 80 percent RH non-condensing

Optimal operating conditions
      Temperature   15 to 35 degrees C or 59 to 95 Degrees F
      Humidity   20 to 80 percent RH non-condensing

Storage range
      Temperature   -20 to 60 degrees C, or –4 to 140 degrees F
      Humidity   20 to 80 percent RH non-condensing

III | INSTALLATION

UNPACKING

Shipments are thoroughly checked for completeness by iSys - The Imaging Systems Group Inc.   Please confirm that your printer has the following:

- iTerra Lite Printer

- AC Power Cord

- Black Ink Cartridge

- Color Ink Cartridge

- Driver CD

- Manual Kit

- Sample Paper

- Centronics™ - IEEE DB25M to CE36M Cable
  (Standard unless Network or USB Connectivity)

- Network Card (Optional – Mounted Internally at Factory)

- USB External Dongle (Optional)

Confirm that any specified options are present, such as a data cable.

Inspect the printer and components for any damage that may have occurred during shipment. Report any damage to the carrier of the shipment, and to your Imaging Systems Group Inc. product representative.

Keep the box and packaging for future shipping in the event of servicing or upgrading issues. This product must be returned to our factory in the original or proper packaging material. The Imaging Systems Group Inc will not cover damage caused during return shipping or due to improper packaging. **Please ensure all ink cartridges are removed before shipping & the print carriage returned to right hand cradle assembly.**

INTERFACE SETUP & CONFIGURATION

Plug the power cord into a grounded AC outlet. Ensure your power source can supply this unit and any other units sharing the same outlet. See specifications for watt usage of this unit.

1. Centronics™
Connect Centronics™ cable to the parallel port on your host computer and to the parallel port on the back of your iTerra Lite. Ensure cables are locked in place to ensure proper connection.

NOTE: The iSys - The Imaging Systems Group Inc. Fast Port must be installed to get optimal data transfer to printer or printer may print at slower speeds when using Centronics™.

To install FAST PORT:
Insert Disc provided by iSys
Select Set Up File under the Fast Port Folder
Follow the steps:
1. Install Shield Wizard – Press Next
2. Input user name and organization – Press Next
3. Destination Folder. Change the folder name to install to a different folder or press Next to Install
4. Install Wizard Completed – Press Finish
5. A "readme.txt" file will pop up and give you the instructions to ensure FAST PORT installed.

Using iSys Fast Port
1. After running setup.exe, an icon "Fast Port" will appear on the Desktop.
2. To use the Fast Port, double click the icon then set port speed and restart the computer.
   When your computer is restarted, set BIOS parallel setting to ECP. If your BIOS setting does not have this option, you cannot use fast speed mode for iSys printers in your computer.
3. Fast Port is special for iSys printers. You may need to change the speed mode back to slow mode while using other printers.
4. This program will only affect the speed of the LPT ports.

Driver Installation for Centronics™ Mode
1. Go to Windows Start – Settings – Printer
2. Add Printer – press Next
3. Welcome to the Add Printer Wizard – press Next
4. Select Local – press Next
5. Use the following port: Scroll to LPT1 – press Next
6. Have Disk – Insert Driver CD supplied by iSys – Browse to find *.inf file on disk – press Open, Press O.K., then press Next
7. Keep pressing next until you get to Finish.
8. Reboot – Go to Start Menu/Settings/Printer
9. Highlight iSys iTerra Lite
10. Right mouse to select Properties
11. Go to Port – Ensure proper port is checked off (LPT1) and press O.K.
12. Right Mouse - go to Printing Preferences – ensure size is iSys Continuous 8.75 inch, Press O.K.
13. Go to Properties – Print Test Page

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2. Network
   1. Connect suitable network cable to your source network connection and to the network socket at the back of your iTerra Lite.
   2. Record Ethernet Address for Software Installation (Located at back of printer and set at factory as 90.0.0.1).

To Configure Network Card & Obtain IP Address
   1. For Win2000 & XP O/S:
   2. Insert CD provided
   3. Go to Windows 2000 or Windows XP Folder (Depending on your system) on CD
   4. Install Installation file (*.exe) found in Setup Folder - Double click – Installation process begins – Continue to Install? Press Yes – Continue through Pop Up Windows by clicking Next or Yes
   5. Install setup.exe (This is the iWaldo software.) – Double click – Installation process begins - Continue to Install? Press Yes – Continue through Pop Up Windows by clicking Next or Yes
   6. Go to Start – Programs – iSys Waldo
   7. Open Waldo (This Allows you to search for network card on the network)
   8. Go to Options
   9. Clear Device List – Yes
   10. Press Search (Bottom Left) then OK
   11. Any available print server IP Address (es) will show up – Highlight Ethernet Address recorded at beginning
   12. Assign IP: Type in IP Address then press Assign.
   13. Go to Options – Select Default Browser – Open to find HTML Browser
   14. To ensure it is assigned – hit configure. Website will pop up of your I305 print server.

Driver Installation
   1. Install Driver CD into disk drive.
   2. Go to Start – Settings – Printer
   3. Add Printer – press Next
   4. Welcome to the Add Printer Wizard – press Next
   5. Select Local – press Next
   6. Use the following port:
        - If port is not listed, cancel Printer Wizard
        - Right Click in Printers Window – Go to Server Properties – Select Ports
   7. Add Port
   8. Standard TCP/IP Port
   9. Add new Port
   10. You should see "Welcome to the Add Standard TCP/IP Printer Port" Wizard. Press Next.
   11. Add in Printer Name or IP Address (As given by System Administrator or as per installation of network card.) Press Next
   12. Press next until you get to finish
   13. Press Apply
   14. Press Close → Highlight Proper Port
   15. Configure Port
   16. Protocol → For either RAW Settings or LPR

17. RAW
    Port Number → Change from 9100 (default) to 4400
18. LPR
    LPR Settings → Queue Name → **d1prn** (default is blank)
    LPR Byte Counting Enabled – ensure check mark is "on"
19. Press OK

Now Add Printer:
1. Go to Start → Settings → Printer
2. Add Printer → press Next
3. Welcome to the Add Printer Wizard → press Next
4. Select Local → press Next
5. Use the following port: Scroll to proper IP Address → press Next
6. Have Disk → Insert Driver CD supplied by iSys → Browse to find *.inf file on disk – press Open, Press O.K., then press Next
7. Keep pressing next until you get to Finish.
8. Reboot → Go to Start Menu/Settings/Printer
9. Highlight iSys iTerra Lite
10. Right click to select Properties
11. Go to Port → Ensure proper port is checked off (LPT1) and press O.K.Right Mouse → go to Printing Preferences – ensure size is iSys Continuous 8.75 in., Press O.K.
12. Go to Properties → Print Test Page

3. USB
1. Connect USB cable to the USB port on the back of the host computer and similarly to the parallel port on the back of your iTerra Lite
2. Ensure cables are locked in place to ensure proper connection

To configure USB & install printer driver
1. Go to Start → Settings → Printer
2. Add Printer → press Next
3. Welcome to the Add Printer Wizard → press Next
4. Select Local → press Next
5. Use the following port: Scroll to correct USB port you wish to use → press Next
6. Have Disk → Insert Driver CD supplied by iSys → Browse to find *.inf file on disk – press Open, Press O.K., then press Next
7. Keep pressing next until you get to Finish.
8. Reboot → Go to Start Menu/Settings/Printer
9. Highlight iSys iTerra Lite
10. Right mouse to select Properties
11. Go to Port → Ensure proper port is checked off and press O.K.
12. Right Mouse → go to Printing Preferences → ensure size is iSys Continuous 8.75 in. and Press O.K.
13. Go to Properties → Print Test Page

USB Printing
Under driver, advanced printing tools.

Ensure spooler is "OFF" and print directly to the printer. If spooler is "ON" results may not be as expected with multicopy selected.
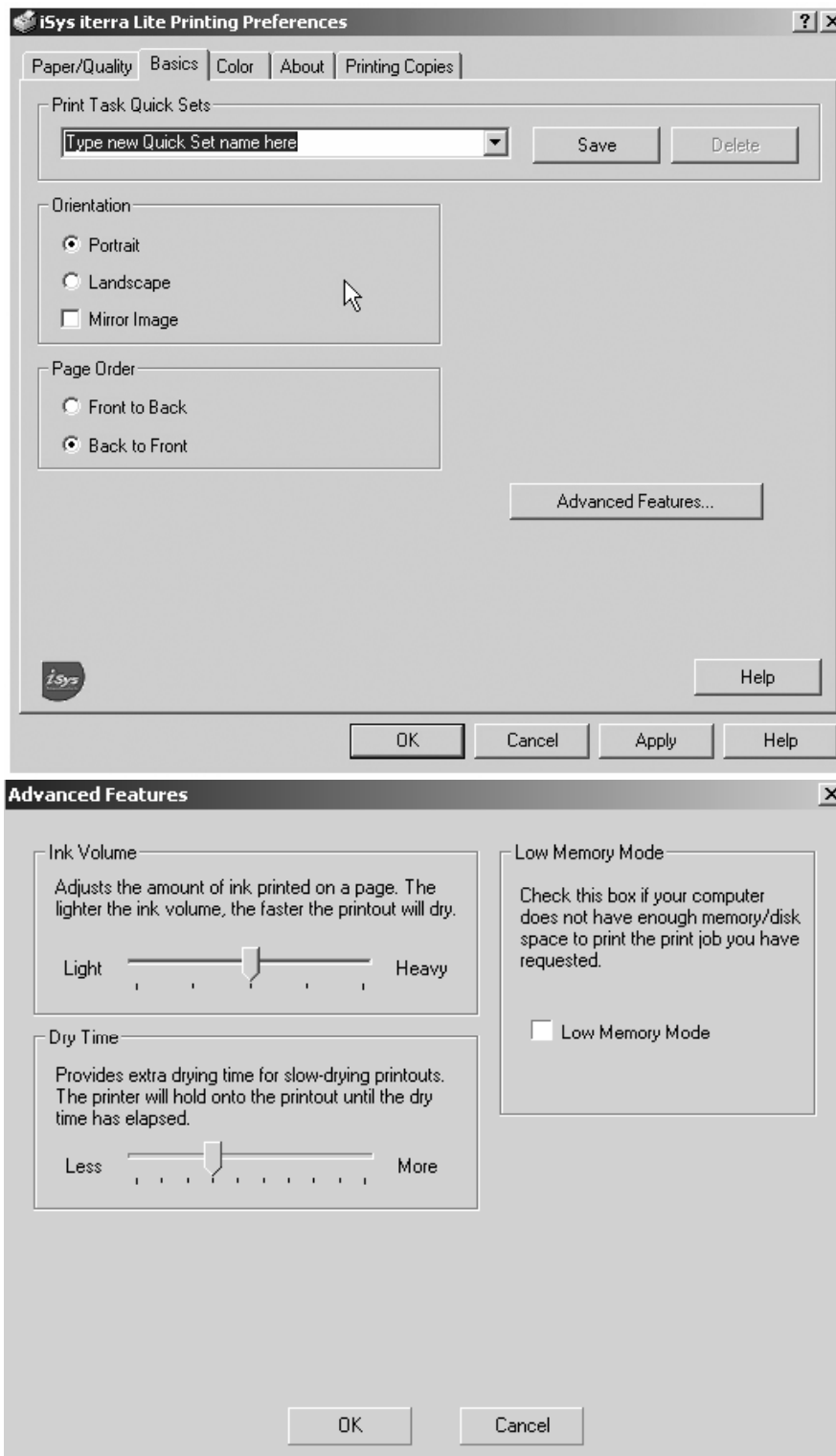

Printing Preferences

The following screen captures represent the manufacturer default settings. To change these settings, go to Window Start Menu → Settings → Printers → Right mouse click on iTerra Lite → Printing Preferences
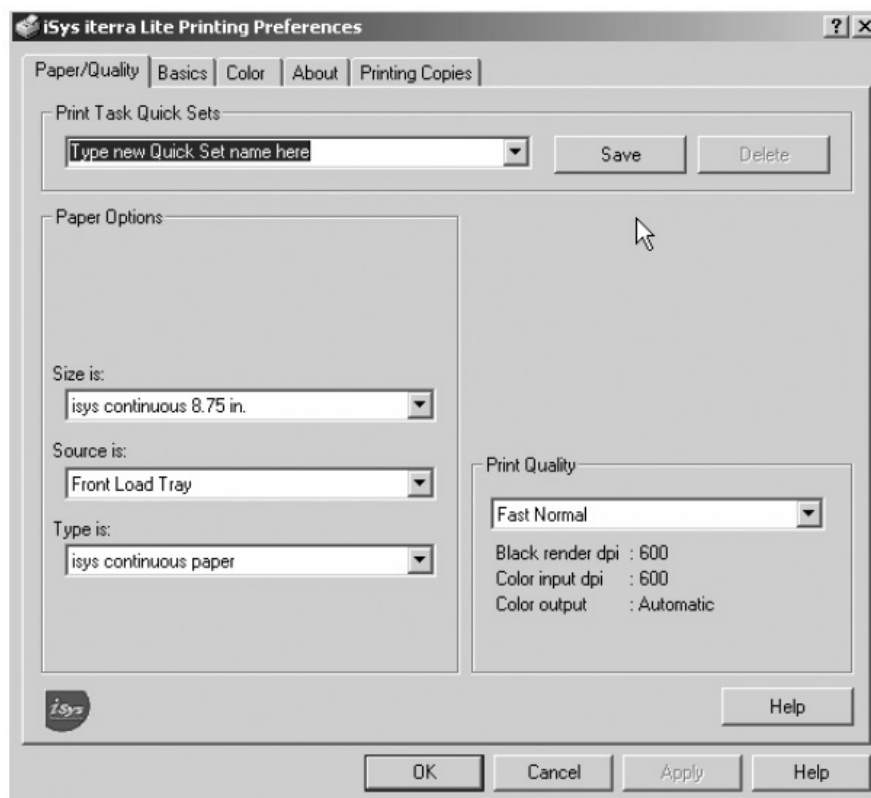
Basic Printing Preferences

By selecting the Advanced Features button, you are able to alter the ink volume and dry times. Best results are achieved with default settings.

Color Printing Preferences

By adjusting these settings, your color levels can be nominally modified on your output. Best results can be achieved by using iSys approved premium coated media (paper).
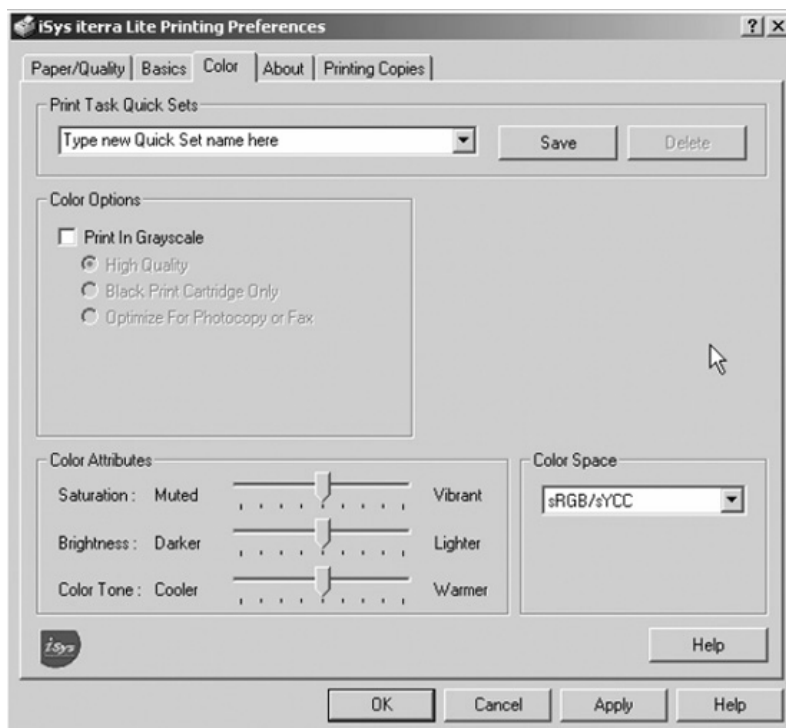
Loading Print Media

Ensure you are using iSys qualified media for all your printing needs. By using qualified media you are ensuring your print quality. For media pricing and availability call iSys - The Imaging Systems Group Inc. at **1-866-415-iSys** or **www.isys-media.com**.

Installing Fan Fold Paper

Ensure eye mark is face up on the right hand side. The first piece of paper should not have the 'I' mark on it. Place paper slowly into the lower opening (media input area). Gently push paper in approximately 8 inches until it stops.   Press offline and then form feed. Paper should then sync itself with the TOF (I marks). Place printer to online status.

***Never pull on paper to remove a print job. Failure to do so will cause printer to error and you will have to re-boot. Mechanical failure can also occur. Use form feed & advance menu items to mechanically move paper when in printer.

Install Ink Cartridges

1. Ensure power is on and menu display is lit up
2. Place printer offline
3. Open printer by pushing the front black levers toward each other (located on the left and right side of the front of the printer)
4. Slide printer forward
5. For each cartridge – raise cradle latch, insert print cartridge, then close cradle latch
6. Close unit
7. Place printer back online

❶ ❸

❷
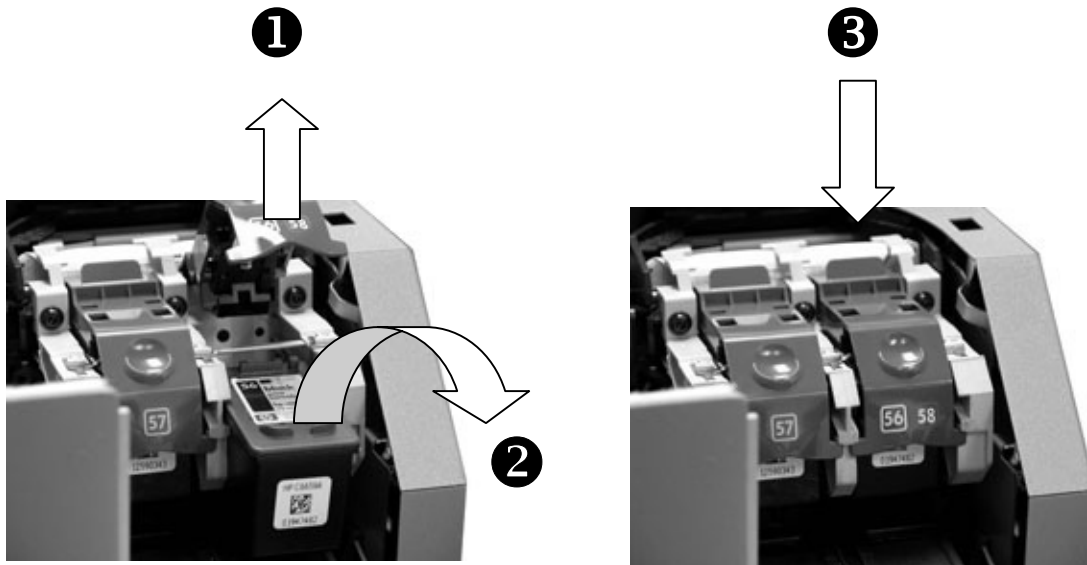
Installation of Desktop version Input and output media Trays:

Desktop Input tray Installation:

Figure # Install1
Input Media Tray - Desktop
iSys Part# KIT-PPR-IT8LD

Figure # Install2
Output Media Tray – Desktop
iSys Part# KIT-PPR-IT8LDR

a) In preparation for installation, assemble all parts in the intended installation area. This should be a flat tabletop area with space in front for the trays to sit not interfering with traffic flow. You will need a Phillips and a Standard 'straight' screwdriver.
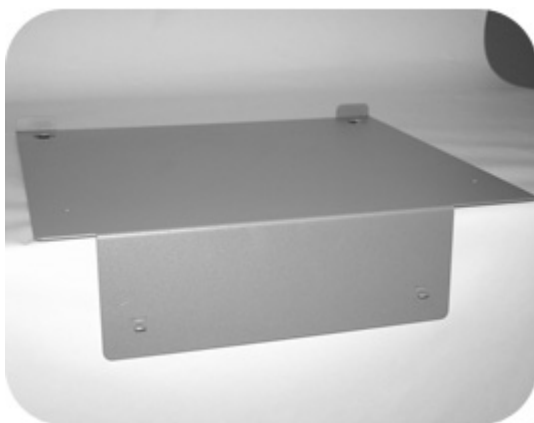

Figure # Install3

Figure # Install4

b) Place the base plate from 'Install1' figure on table as in figure 'Install3', hanging over the edge of the table with right angle firmly against the table top.

c) Position printer on top of plate ensuring that the rear printer feet are in the hole slots cut into the base plate (at rear of plate). Positioning of printer should be as in figure 'Install4'.
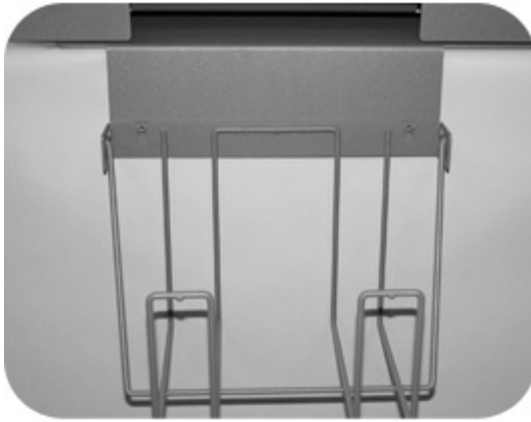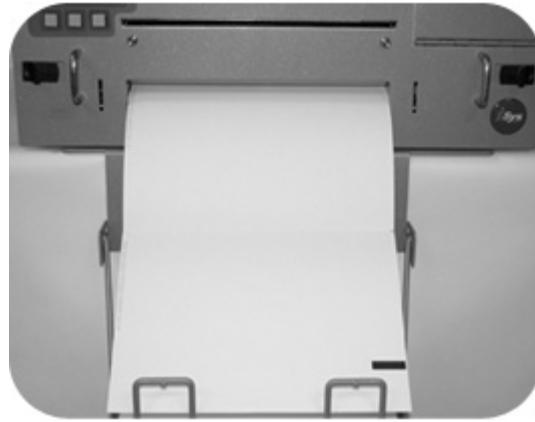

Figure # Install5

Figure # Install6

d) Position desktop version input media tray as in figure 'Install5', by hanging tray portion on tabs protruding from base plate.

e) Paper should be installed prior to attaching the Output media tray. Place continuous paper in input tray, with I-marks face up and on right hand side (as in figure 'Install6'). Ensuring that the first sheet fed is a non I-mark sheet, slowly insert in lower slot in front of printer, until resistance is felt (should be approximately eight inches). Press 'form feed' button on the operator panel. Paper will move forward seeking out the first I-mark and setting the top of form alignment.

Desktop Output Tray Installation:
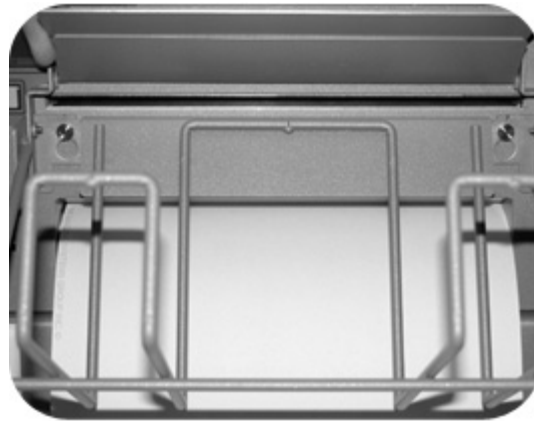

Figure # Install7

Figure # Install8

a) Using a Phillips screwdriver remove two screws on front plate of printer and replace with specialized screws found in Output Tray Kit . The new screws will require a slotted screwdriver. Install replacement screws and tighten firmly. Properly installed screws will protrude from printer approximately ¼ " from printer front plate. Refer to figures 'Install2 & Install7' for clarity.

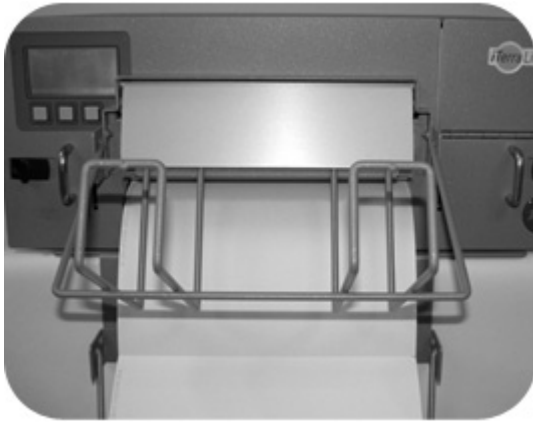b) Hang tray portion of output tray over new screws installed in step a.
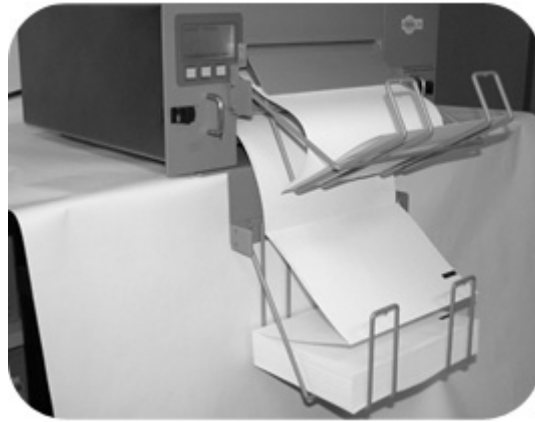
Figure # Install9

Figure # Install10

Resulting installation of the Input and output media trays should look as in the 'Install9 and Install10' figures. When paper is properly fed into printer (first sheet being a non I-mark sheet), output collection will be uniform and stacked as expected. Output Tray will stack or fold up to 500 API sheets maximum.

Installation of Rack Mount version Input and output media Trays:

Rack Mount Input tray Installation:

Figure # Install11

a) Installation of the Rack Mount Input and Output trays assumes that the printer has been installed in a rack unit already as in figure 'Install11'. Optional Rack Mount hardware for various depth racks is available from iSys.

Figure # Install12
Input Media Tray – Rack Mount
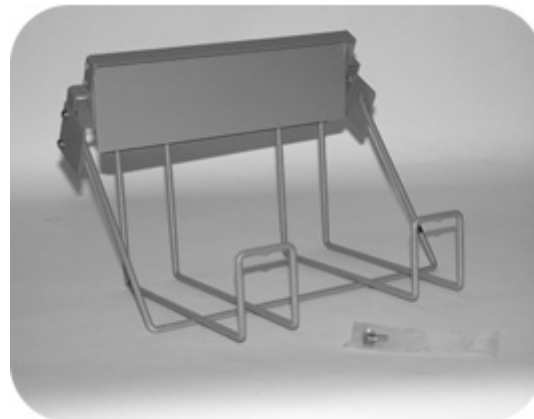**iSys Part# KIT-PPR-IT8LR**

Figure # Install13
Output Media Tray – Rack Mount
iSys Part# KIT-PPR-IT8LDR

b) Parts required for installation of the Rack Mount input media tray are those found in figure 'Install12".

Figure # Install14

Figure # Install15

c) Taking the input media tray insert the tabs located at the top side of the tray, into the two slots located on the front of printer as in figures 'Install14 & Install15'.

Figure # Install16 - correct

Figure # Install17 - incorrect

d) Once tabs have been inserted into printer, lower tray in a downward motion until tray hangs from printer as in figure 'Install16'. An incorrect seating of the tabs in the printer slots, may look like that portrayed in figure 'Install17'.

Figure # Install18

e) Paper should be installed prior to attaching the Output media tray. Place continuous paper in input tray, with I-marks face up and on right hand side (as in figure 'Install18'). Ensuring that the first sheet fed is a non I-mark sheet, slowly insert in lower slot in front of printer, until resistance is felt (should be approximately eight inches). Press 'form feed' button on the operator panel. Paper

will move forward seeking out the first I-mark and setting the top of form alignment.

Rack Mount Output tray Installation:

Figure # Install19

Figure # Install20

c) Using a Phillips screwdriver remove two screws on front plate of printer and replace with specialized screws found in Output Tray Kit . The new screws will require a slotted screwdriver. Install replacement screws and tighten firmly. Properly installed screws will protrude from printer approximately ¼ " from printer front plate. Refer to figures 'Install19 & Install20' for clarity.

d) Hang tray portion of output tray over new screws installed in step a.

Figure # Install21

Figure # Install22

Resulting installation of the Input and output media trays should look as in the 'Install21 and Install22' figures. When paper is properly fed into printer (first sheet being a non I-mark sheet), output collection will be uniform and stacked as expected. Output Tray will stack or fold up to 500 API sheets maximum.
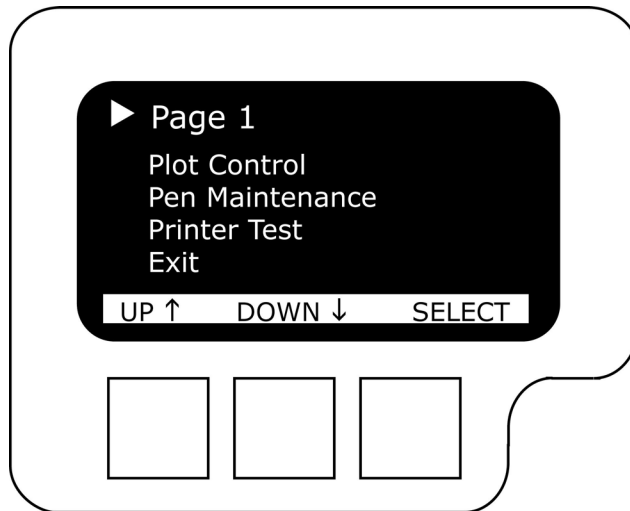
Menu Guide Settings

Changing Menu Settings
1. To use the Menu you must first press offline.
2. Press Menu (far right button). Use the Arrow buttons to move up & down through menu items. Press Select
3. To choose a selection – press Select – you will see a pointer on the left margin that will blink. Press up or down arrow to change options. Press Deselect to save changes (blinking will stop)
4. To Exit – scroll down to exit, then select.

**If at anytime you need to re-boot the printer without turning the unit on and off by the rear power switch, press and hold the middle button for >2 seconds. Printer will go into soft power off mode. Press middle button again (holding for >2 seconds) and printer will perform reboot sequence.

Menu Options

```
┌─────────────────────────────┐
│  ▶ Page 1                   │
│     Plot Control            │
│     Pen Maintenance         │
│     Printer Test            │
│     Exit                    │
│   UP ↑   DOWN ↓   SELECT    │
└─────────────────────────────┘
```

▷ **Page 1**

Plot Control

1 – TOF (Top Of Form) Seek
If "on" media advances to next TOF (I - mark)
If "off" printing will commence immediately (no line up with TOF)
2 – TOF Alignment
Allows you to adjust from 0 – 0.5 inch forward from top of form. The default is 0.20 inches and goes up and down by 0.02 increments.
3 – EOJ Advance (End of Job)
Allows you to advance paper out of printer from 0 to 12.5 inches
4 – Exit

Pen Maintenance

1 – Pen Clean
Allows you to ensure ink cartridges are free of debris, dust, clogging, etc. Options are "yes" and "no".
**2 – Pen Alignment**
Must be done after install of new ink cartridges to ensure proper alignment between black and color pens. (Registration). Options are "yes" and "no".

Printer Test

Test Page – select Test Page to print. Options are "yes" and "no".

Engine Page – select Engine Page to print. This works best on 8.5x11 cut sheet. Options are "yes" and "no".

```
  ▶ Page 2
     Adjustments
     Warnings/Errors
     Defaults
     Exit
    UP ↑    DOWN ↓    SELECT
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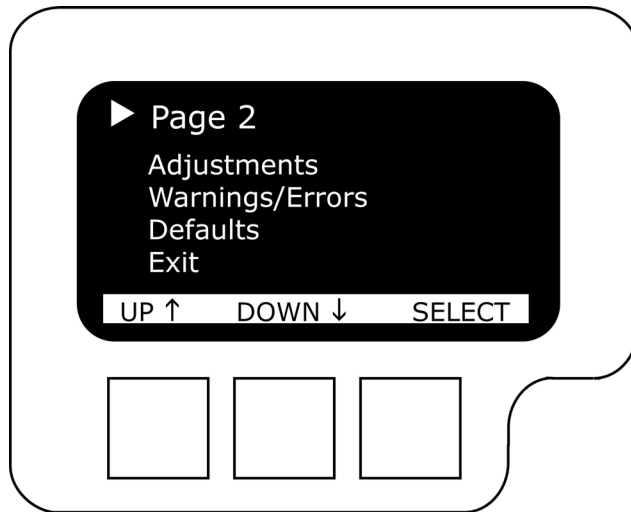
▷ **Page 2**

Adjustments

TOF Sensor –allows you to adjust the sensor when troubleshooting. Your printer has been configured at the factory to sense low black density I-marks, so adjustment is not normally required. If you feel you need to make adjustments to the sensor, please contact an iSys certified technician and you will be walked through the process.

CAUTION: Careful consideration must be taken when you are to make these changes.
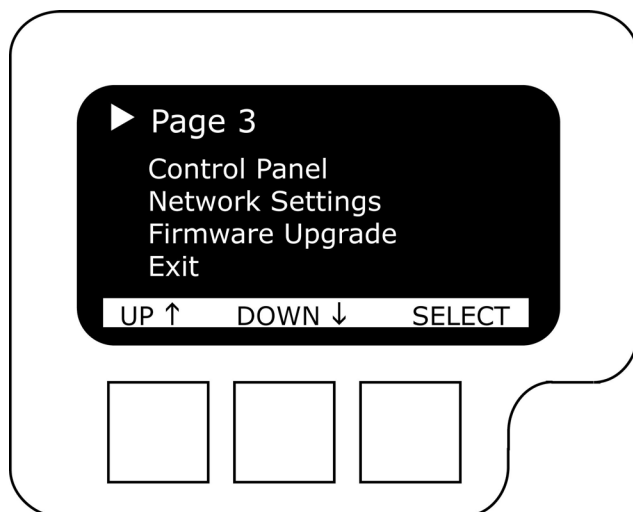
Warnings/Errors

Ink Cartridge Levels are detected. You may adjust at what level of ink remaining you wish to be warned, have the printer "stop" or no warning requiring operator intervention to detect when ink has run out. Available settings are:
1. Off – No warning or interruption of print job will occur, ink will run out and operator will be the only intervention. May require restarting of jobs due to printing without ink.
2. Warning – Will Flash Warning Signal. No job interruption occurs.
     Warn Black = 0% Color = 0%
     Warn Black = 5% Color = 5%
     Warn Black = 10% Color = 10%
3. Stop – Printer will stop with these settings and will ask
     "Do you wish to continue?"
     Change ink cartridge and then Press Yes and printer will continue.
     Stop Black = 0% Color = 0%
     Stop Black = 5% Color = 5%
     Stop Black = 10% Color = 10%

Defaults – Restores printing preferences back to factory defaults
Default Settings

1.	TOF Seek	On
2.	TOF Align	+0.20"
3.	End of Job (EOJ) Advance	Off
4.	Ink Levels	Off
5.	LCD Contrast	4
6.	Sound Option	Off

```
  ▶ Page 3
     Control Panel
     Network Settings
     Firmware Upgrade
     Exit
    UP ↑    DOWN ↓      SELECT
```

▷ **Page 3**

Control Panel

LCD Contrast – Allows you to select from 1 – 8 the contrast of the lighting on your display. Different environmental operating conditions may require this setting to be adjusted.

Sound Options – Allows you to set your error sounds by time (30 sec, 5 sec, or Off). When sound audible is active, press any front panel key and beeping will stop.

Network Settings

Not Available at this time

Firmware Upgrade

This allows you to upload a firmware file, provided by iSys - The Imaging Systems Group Inc., from your host computer. (Options are Upload File – Yes/No)

Instructions and new firmware will be posted on the website: **www.isys-group.com**. You will normally be notified by iSys - The Imaging Systems Group Inc. if updating is required.

Front Panel Soft Power Off and On

This printer is equipped with a soft power off and on setting that is most useful for printers installed in a rack mount setting. This feature can be accessed when panel display is in the main status mode. Soft power off the printer by depressing the middle front panel button for greater than 2 seconds. Printer will go into powered off mode and yellow status light will blink once per second. Power unit back on by depressing the middle front panel button for greater than 2 seconds. Printer will go through standard boot up sequence.

V | MAINTENANCE

REGULAR MAINTENANCE

Ordering Replacement Supplies

To purchase Ink Cartridges, visit our website at **www.isys-media.com** or call us at 1-866-415-4797.

Replacing Ink Cartridges
Place printer offline
Open printer by pushing the front black levers toward each other (located on the left and right side of the front of the printer)
Slide printer forward
For each cartridge – raise cradle latch, insert print cartridge, then close cradle latch
Close unit
Place printer back online
Run Pen Alignment for proper registration

Print Engine Expectant Life Cycle

Your printer engine is warranted for 60,000 sheets (8.5" x 11"), or 55,000 feet, or 105,600 well log sheets (6.25" in length) or six months (which ever occurs first).

How Do I know when to replace my Print Engine?

When print quality starts to noticeably deteriorate and you have performed various maintenance sequences, it is highly likely that your print engine has reached End Of Life Cycle.

Contact iSys - The Imaging Systems Group Inc. at 1-866-415-iSys (4797) and ask to speak with a service agent, to confirm print engine needs to be replaced.

Upon determination of print engine end of life, you can order the replacement engine from iSys –The Imaging Systems Group Inc., by calling 1-866-415-iSys (4797). Replacement engine part number is iL-ENG.

Upon receipt of print engine component from iSys or a registered reseller, proceed to removal of old print engine and then on to installation of a new print engine sections within this manual.

Removal of old Print Engine:
Here are the steps to remove your print engine:

a) Place the printer on a stable, horizontal surface or have another individual assist. Slide black printer lock switches (located on front of printer) towards the middle of the printer and slowly slide out the printer from the main chassis no more that three and one half (3.5) inches.

b) Remove the ink cartridges (see Replacing Ink Cartridges)

c) Unplug printer from wall socket.

d) Open the printer and slide forward until stopped by rear rail guide retainers.

e) Unplug switch panel cable (Located left front behind switch panel)

f) Unplug grey interface cable – Lift up top and bottom lock down clips (Located back right)
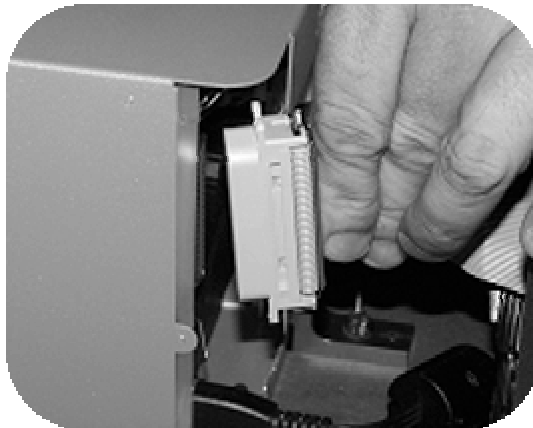
g) Unplug power cable (Located back right)

h) Unplug TOF switch panel cable (Located back right)

i) Remove ground wires from both printer and bottom plate by gently pulling on the blue cable clips


j) Release bottom panel of printer by pressing levers located at back left and right and pulling bottom assembly from internal rails, releasing the two components from each other.

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k) Remove 2 red wing nuts on back left and right and other associated lock down hardware. Put these items aside for engine installation process.

l)   Slide Print Engine toward the rear of the unit and free from paper path tracks.
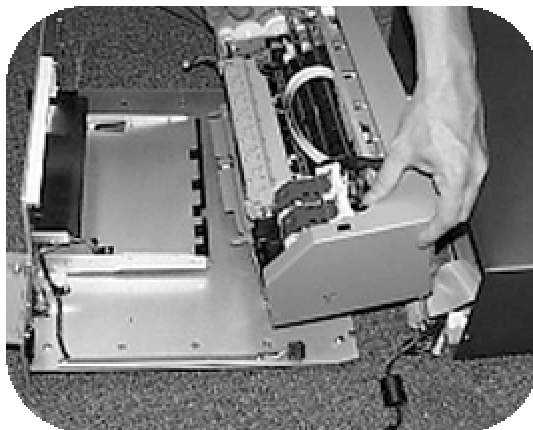
m) Discard old Print Engine.

To install new Print Engine:
a) Slide Print Engine back onto paper path guide until both sides click and lock.
b) Replace lock down hardware and secure with red wing nuts.
c) Reinstall bottom assembly onto internal guide rails, depressing levers on left and right sides. Continue to slide printer inwards for approximately one (1) inch, until rear locked position is attained.
d) Attach:
    1. Switch Panel Cable – if you forget, when turning the printer on again it will give you a warning in the display and will sound an alarm condition.
    2. Grey Interface Cable.
    3. Power Cable.
    4. TOF Switch Panel Cable.
    5. Ground Wires – secure in two places by pushing blue clips back on to secured metal clips (one on rear of print engine, the other on main chassis component.
e) Depress guide locks and slide printer back into casing, until fully inserted and front black plastic printer locks are engaged.
f) Plug electrical cord back in – Power On unit.
g) Re-insert ink cartridges.

VI | TROUBLESHOOTING

Problem: **Paper not feeding through printer**
Description: The paper is not all the way in and the printer is trying to form feed. A flashing orange light will come on and the Status will change to NO PAPER.
Solution: Cancel the Job or Load Paper and resume. Ensure the paper is fed into the unit approximately 8 inches or until it stops.

> Never manually pull on paper to remove a print job. Always go offline first and use form feed or advance options on printer. Failure to do so will result in printer error.

Problem: Paper Jam
Description: Paper is stuck inside the printer. – LCD Menu – STATUS: ERROR
Solution: Clear the paper path first by opening the printer and sliding it out from the casing. At the back of the unit (on the inside) you will find a black plastic paper guide. There are 2 black levers on the left and right side – press these inward and guide unit will be free for removal. Remove errant paper from guide area carefully. Put the black paper guide back into place by pressing on both the left and right hand side until you hear it lock into place.   Press Restart. Printer will restart. If a print job was in progress it will be automatically cancelled.

***Make sure there are no paper fragments remaining in the printer. ***

Problem: Printer Does Not Print
Description: Job has been sent to printer, but nothing is happening. Power is on.
Solutions:
1. Check connections to printer.
2. Print a test page from the printer → Go to Menu → Page 1 – Printer Test → Test Page – select Test Page to print. Select "Yes". If test page prints but job doesn't, continue to #3.
3. Check for errors in Windows Operating System.
4. Check printing properties – ensure proper printer is selected.

Problem: Poor Print Quality
Description: Output is hard to read, colors are not strong, streaking or dots appear
Solutions:
1. Print cartridges may be low on ink – Replace ink cartridges
2. Print cartridges may need to be cleaned – See ink cartridge cleaning
3. Paper quality may be poor. Try using iSys qualified coated media.
4. Print engine may have reached end of life – See Print Engine Replacement section

Problem: Paper is wrinkling or tearing
Description: Physical output of paper is creased or tears
Solutions:
1. Ensure paper width is between 8.5" and 8.75"
2. Paper quality may be poor. Try using iSys - The Imaging Systems Group Inc. qualified coated media.

Problem: Can't make changes to menu settings
Description: Keys on printer are locked out → nothing happens when depressed
Solution:
1. Cycle power to printer – shut the unit off for 5 seconds, power back on

Problem: Form feed stops before desired length or does not stop at top-of-form (TOF) marks ("I" marks)
Description: Advancement of paper is not at preferred position
Solutions:
1. Paper quality – If the "I" marks (TOF) are not clearly read by the printer, it may not line up properly. Ensure you are using iSys - The Imaging Systems Group Inc. qualified media.
2. Reset printer to Default Settings, then re-adjust preferred Form Feed options, if desired.

Problem: Case Open
Description: Error Display: Case Open
Solution: Ensure printer is completely pushed back into the case. You should hear the latches on the left and right hand side lock in place.

Problem: Pen Not Working
Description: Error Display: Pen Incorrect
Solution: This means that you have placed the wrong ink cartridge into the ink cartridge slots. Check to make sure that the color ink jet cartridge is on the left and the black ink jet cartridge is on the right.

Problem: Pen Failure
Description: Error Display: Pen Failure
Solution: One of the ink cartridges has become defective and is malfunctioning. Swap out the ink cartridge (s).

Problem: Operator panel cable is disconnected
Description: Error Display: Swp cable unplugged
Solution: This error will occur if the cable connecting the operator panel and the printers main logic has become disconnected. Open printer casing as if you were going to change ink cartridges. Reattach operator display panel, by plugging cable back into fixed panel. If trouble persists, call your service representative.

Problems:
-Grinding Noises when printing
-Prints stair steps down the left margin of the self-test page
-The ink carriage slams to the left or right side of the printer
-Double-printed image or shadowed letters
-The text is wavy, where it is not straight, going up and down
-Gaps appear in printed text or images

NOTE: Clean the encoder strips only after checking all other issues that cause the symptoms listed above. Run pen alignment and ensure ink cartridges are clean and full. Run the internal test plot → if successful, problem may be program application or driver related.

Cleaning the encoder strips are not to be done except as the last step to prevent the printer from being sent to service. Cleaning encoder strip should not be attempted unless suggested by iSys certified Service personnel

NOTE: It is *important not to clean the encoder strips for the following symptoms: poor* media quality, paper jams, paper skewing, ink-cartridge missing dots or white gaps through print, or smeared or streaked black.

Solution: Clean the encoder strips (both the horizontal and vertical encoder strips) located inside the printer by following the steps below:

CAUTION: Extreme care must be taken during the cleaning process. If too much pressure is placed on the encoder strip, it could become scratched (destroying the etching on the strip), bent, stretched, broken, or dislodged from the inside of the printer. If any of this damage occurs, the printer may become inoperable.

1. Turn off the printer and unplug it from the power source.
2. Open the top-cover and find the horizontal encoder strip. It is a mostly clear strip that reaches from the left to the right and is located above the silver carriage rod. The strip is clear with very fine lines imprinted on it, giving it a light gray appearance. It is approximately 0.5 mm or 0.2 inches high.

Figure 1 – Locating the horizontal encoder strip

Figure 2 – Locating the horizontal encoder strip
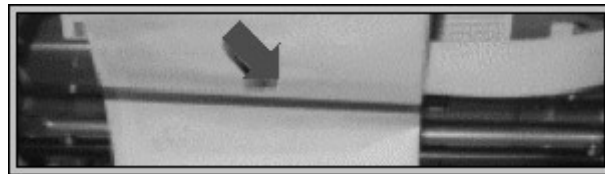
3. If dust is the only foreign matter on the horizontal encoder strip, try blowing the dust off with a blower such as canned air. If needed, go to step 4.
4. Moisten with water a small lint-free cloth or facial tissue.
5. With the water, moisten tissue, gently grasp both the front and the back of the encoder strip. Slide the cloth or tissue back and forth as far as possible, taking care not to touch the carriage rod.

---

6. After cleaning the encoder strip, close the door, plug in the printer, and turn it on.
7. Print a test page to ensure that the printer is functioning properly.

To clean the vertical encoder strip, follow the above steps. The vertical encoder strip is a round, clear disc that can be found on the left hand side of the printer.

To rotate the vertical encoder strip to clean throughout, move the middle white disk (without the encoder strip attached) in a clockwise manner. This will cause the encoder strip to move in counter clockwise.

***Note: Ensure the vertical encoder strip is moving counterclockwise. Failure to do so may result in TOF (Top of Form) errors and misalignment.
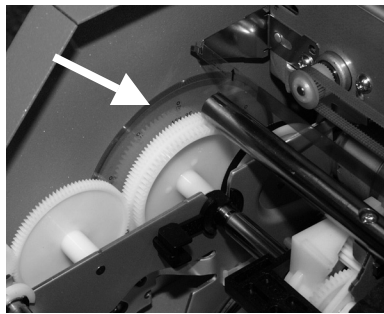
If cleaning the encoder strip does not resolve the problem, please contact iSys - The Imaging Systems Group Inc.at 1-866-415-4797.

VII | WARRANTY – Original Manufacturers Warranty (OMW)

iSys - The Imaging Systems Group Inc. warrants the iTerra Lite Color Plotter (Product) to be free from defects in materials and workmanship and will remedy any such defect according to the terms of the *Limited Warranty*. Please see the Warranty Documents provided with the purchase of your iTerra Lite.

VIII | EXTENDED WARRANTY – Extension of Warranty

iSys - The Imaging Systems Group Inc. also offers the extension of your warranty, which takes effect immediately following OMW. This Extended Warranty includes coverage for one year's time and is for the chassis component. Please see your Sales Executive or contact us at 1-866-415-4797 to find out how you can take advantage of our extended warranty program.
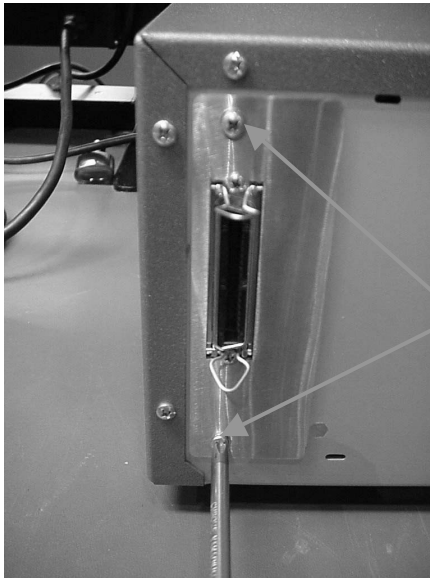
IX | SERVICE & SUPPORT

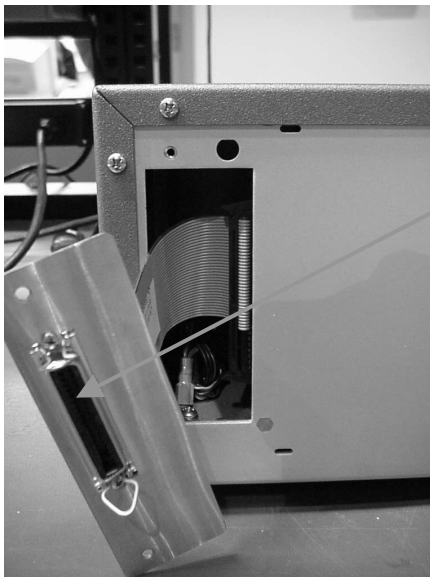**If at any time you wish to contact iSys - The Imaging Systems Group Inc., please do so in any of the following ways:**
- Via the web: **www.isys-group.com**
- Via e-mail: **support@isys-group.com**
- Via phone: **1-866-415-4797**
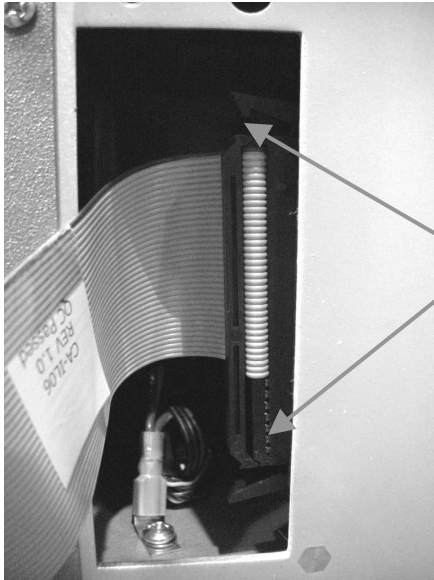- Via fax: **1-403-204-1971**

Connectivity Interface Change [Parallel to Network]

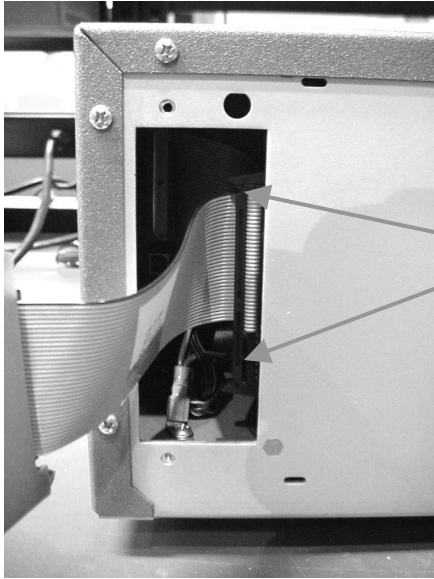Remove the two screws holding the Centronics™ bulkhead from the plotter

Pull the Centronics™ bulkhead plate away from the plotter

Detach the Centronics™ interface Ribbon cable by lifting the tabs on the connector

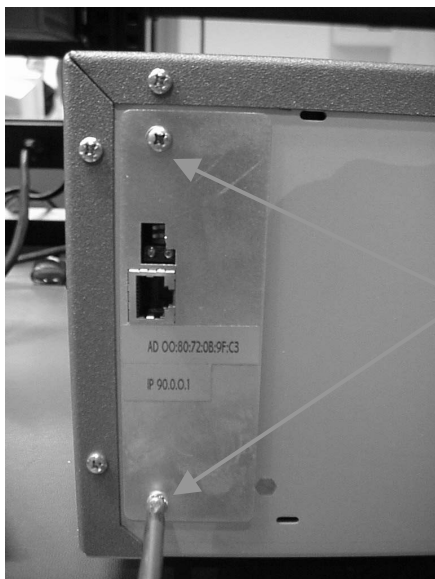Now you can install the network interface

Plug the network interface ribbon cable into the connector and make sure the lift tabs are in the closed position on the ribbon cable
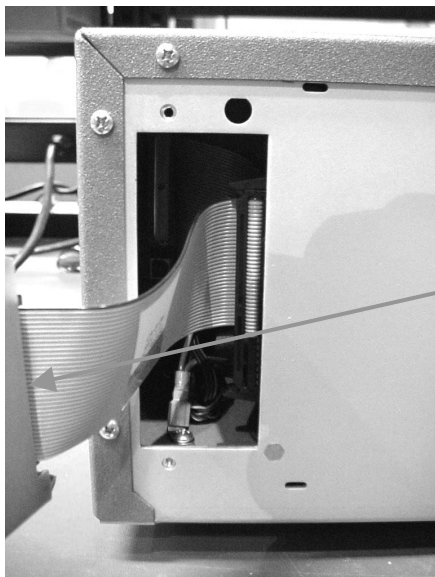

AD OO:80:72:0B:9F:C3

IP 90.0.0.1

Slowly insert the network bulkhead into the plotter and replace the screws. Now you are ready to use your network interface.
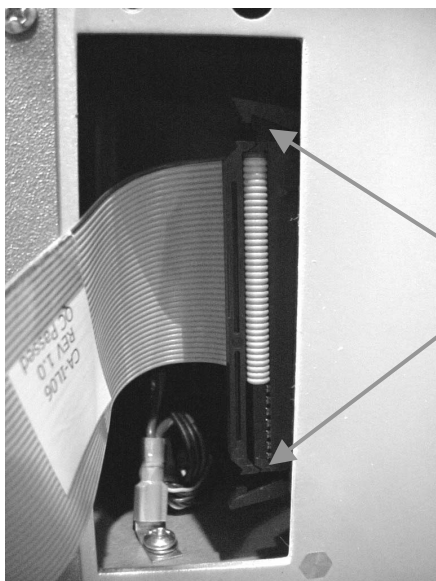
Connectivity Interface Change [Network to Parallel]

Remove the two screws from the network bulk face plate

Pull the Network bulkhead plate away from the plotter

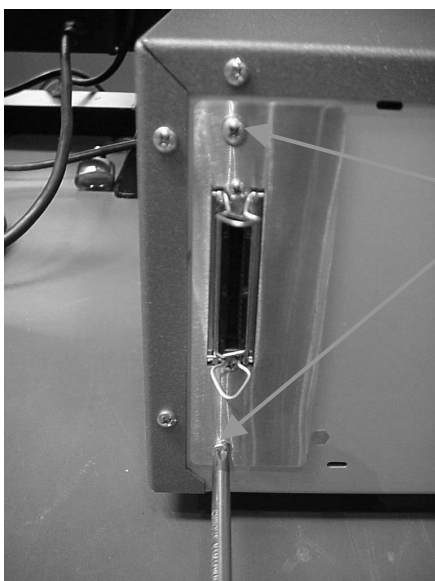Detach the Network interface Ribbon cable by lifting the tabs on the connector

Now you can install the Centronics™ interface
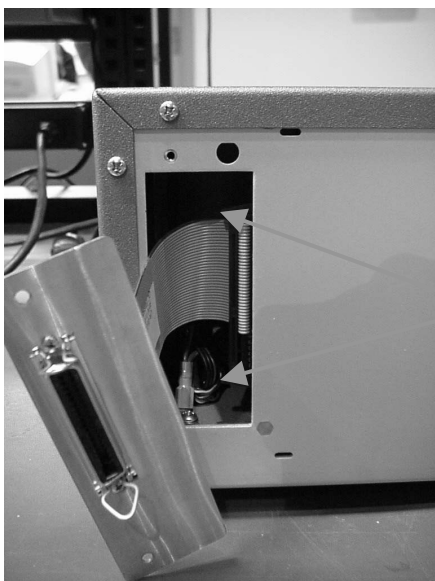
Plug the Centronics™ interface ribbon cable into the connector and make sure the lift tabs are in the closed position on the ribbon cable

Slowly insert the Centronics™ bulkhead into the plotter and replace the screws.
Now you are ready to use your Centronics™ interface.

Material Safety Data Sheets - MSDS

C6657A–No.57 Color

Product Safety Information Sheet
General environmental and safety information for consumers

1. Product and Company Identification

1.1 Product identification
C6657A – No. 57 ink (cyan, magenta and yellow)

1.2 Company undertaking identification
Hewlett-Packard Company
1000 NE Circle Boulevard
Corvallis OR 97330-4239
USA

1.3 Emergency telephone number
Hewlett-Packard Health Effects Line
1-800-457-4209 (USA and Canada) or
Intl +1-503-494-7199 (all other areas)

1.4 General information telephone number
1-208-323-2551 (in USA and Canada) or
Intl +1-208-323-2551

Hazard Rating	NFPA
Health	1
Flammability	2
Reactivity	0
Special	none

2. Composition/Information on ingredients.

For cyan, magenta and yellow ink formulations

Component	CAS number	% by weight	Workplace limits (PEL,TLV)
1,5-pentanediol	111-29-5	<10	not established
2-pyrrolidone	616-45-5	<10	not established
2-ethyl-2-(hydroxmethyl)-1,3-propanedoil	77-99-6	<10	not established
Nitrate compounds	Not specified	<8	not established
Trade secret materials	Not specified	<5	not established
Colorants	Not specified	<7	not established
Water	7732-18-5	balance	not established

3. Hazard Identification

3.1 Primary Routes of Exposure
Skin, eye, oral, and inhalation

3.2 Acute Health Hazards
Skin: May cause slight skin irritation characterized by redness and swelling after prolonged contact. Indications may be masked by color of ink.

Eye: May be mildly irritating.

Oral: May Cause stomach upset. Contains nitrates which can cause methaemoglobinaemia and respiratory depression. (for additional information, refer to section 11)

Inhalation: Prolonged inhalation may result in irritation to respiratory tract.

3.3   Chronic Health Hazards
None noted.
3.4   Carcinogenicity
No substance in this ink formulation is a listed carcinogen according ACGIH, EPA, EU, IARC, MAK and OSHA criteria.

4.   First Aid Measures

4.1   Emergency First Aid Procedures

Call the Hewlett-Packard Health Effects Line at 1-800-457-4209 (Intl +1-503-494-7199 outside of USA and Canada)

First aid for skin
Wash affected areas thoroughly with soap and water. Clothing should be laundered before reuse. **Seek medical attention if skin irritation persists.**

First Aid for eyes
Contact with eyes may cause mild irritation. Immediately flush with large amounts of clean, lukewarm water (low pressure) for at least 15 minutes. **Seek medical attention if eye irritation persists.**

First aid of ingestion
Ingestion of ink may cause stomach upset. Call the Hewlett-Packard Health effects line (above). **Seek medical attention if stomach upset persists. (Contains nitrates, refer to section 3.0 or 11.0)**

First aid for inhalation
Remove person affected to fresh air area.

5.   Fire fighting Measures

Flashpoint:	Auto-ignition temperature:
>141 degrees F, >61 degrees C	Not determined
Extinguishing Media: water, dry chemical, carbon dioxide, foam	**Special fire fighting procedures:** none
Unusual fire and explosion hazards: no special hazards shown	

6.   Additional release Measures
Spill or Leak Procedures
No special procedures are indicated. Use absorbent towels to wipe up ink.
Rinse area with damp cloth to remove traces of ink.

7.   Handling and Storage
KEEP OUT OF REACH OF CHILDREN

Storage Temperature: -20 to 60 degrees C	**Shelf Life:** 24 months
Handling and Storage precautions: do not use inkjet cartridge when frozen. Ensure inkjet cartridge exterior is dry before inserting in printer.	**Special Sensitivity:** none

8. **Exposure Control / Personal Protection**

No special eye or skin protection is needed for cleanup of spills. Standard eye and skin protection for laboratory chemical safety is required.

9. **Physical and Chemical Characteristics**

Appearance: cyan, magenta and yellow liquid	**Physical State:** liquid at room temperature
Boiling Point: not applicable	**Specific Gravity:** 1.06-1.07 g/ml
PH: 6.6 to 8.5	**Solvent content:** <41%
Solubility in water: soluble	**Vapor density:** >1 (air = 1.0)
Odor: not applicable	**Vapor pressure:** not applicable

10. **Reactivity**

Stability: stable under normal storage conditions	**Thermal decomposition products:** oxides of carbon, nitrogen and water
Incompatibilities: strong oxidizers, strong bases, bleach and other hypochlorite containing cleaning agents	**Hazardous polymerization:** none

11. **Toxicological Information**

Refer to sections 3. Hazard Identification and 4.First Aid Measures.
The Ink formulation contains nitrates.
- Nitrates and their derivatives can cause methemoglobinemia and result in respiratory depression. Primary indicators of prolonged overexposure include shortness of breath, headaches, dizziness and cyanosis (bluish skin and lips).

12. **Ecological Information**

No data available

13. **Disposal Considerations**

Dispose in accordance with all applicable federal, state and local laws.
Waste classifications based on aquatic toxicity testing:
     California – hazardous
     Washington – non hazardous
     EU – non hazardous

14. **Transportation Information**

Not a regulated article under DOT, IATA, ADT or RID.

15. **Regulatory Information**

According to EU Directive 88/379/EEC, this product is not classified as dangerous and therefore no hazard label is required.
For other countries, including the USA, no product label would be required.
Contains no chemical required by the State of California for listing under proposition 65.
Contains no chemical subject to EPA TSCA 12(b).

16. **Other Information**

Date prepared: May 29 2001.

Disclaimer: This Product Safety Data Sheet is offered without charge to the customers of iSys – The Imaging Systems Group, Inc. Data is the most current known to Hewlett-Packard (iSys partner) at the time of preparation and is believed to be accurate. It should not be construed as a guaranteeing specific properties of the products as described or suitability for a particular application.

Product Safety Information Sheet
General environmental and safety information for consumers

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1. Product and Company Identification

1.1   Product identification
C6656A – No. 56 black ink

1.2   Company undertaking identification
Hewlett-Packard Company
1000 NE Circle Boulevard
Corvallis OR 97330-4239
USA

1.3   Emergency telephone number
Hewlett-Packard Health Effects Line
1-800-457-4209 (USA and Canada) or
Intl +1-503-494-7199 (all other areas)

1.4   General information telephone number
1-208-323-2551 (in USA and Canada) or
Intl +1-208-323-2551

Hazard Rating	NFPA
Health	1
Flammability	2
Reactivity	0
Special	none

2   Composition/Information on ingredients.

This ink cartridge contains an aqueous ink formulation

Component	CAS number	% by weight	Workplace limits (PEL,TLV)
Carbon black	1333-86-4	<5	not established
Isopropyl alcohol	67-63-0	<3	400 ppm (983 mg/m cubed) OSHA, PEL and NIOSH TLV *
2-pyrrolidone	616-45-5	<10	not established
Trade secret materials	Not specified	<10	not established
Water	7732-18-5	balance	not established

*NIOSH also applies a 2000 ppm IDLH (immediately dangerous to life or health) and 500 ppm (1225 mg/m cubed) short term exposure limit to isopropyl alcohol.

3   Hazard Identification

3.1   Primary Routes of Exposure
Skin, eye, oral, and inhalation

3.2   Acute Health Hazards
Skin: May cause slight skin irritation characterized by redness and swelling after prolonged contact. Indications may be masked by color of ink.

Eye: May be mildly irritating.

Oral: May Cause stomach upset.

Inhalation: Prolonged inhalation may result in irritation to respiratory tract.

3.3   Chronic Health Hazards
None noted.

3.4   Carcinogenicity
Carbon Black has been classified by the International Agency for Research on Cancer (IARC) as Group 2B (possible human carcinogen). Neither this component nor the other ingredients have been classified as carcinogens according to ACGIH, EPA, EU, MAK and OSHA criteria. According to IARC, Printing inks are not classifiable as to their carcinogenicity to humans (Group 3).

4   First Aid Measures

4.1   Emergency First Aid Procedures

Call the Hewlett-Packard Health Effects Line at 1-800-457-4209 (Intl +1-503-494-7199 outside of USA and Canada)

First aid for skin
Wash affected areas thoroughly with soap and water. Clothing should be laundered before reuse. **Seek medical attention if skin irritation persists.**

First Aid for eyes
Contact with eyes may cause mild irritation. Immediately flush with large amounts of clean, lukewarm water (low pressure) for at least 15 minutes. **Seek medical attention if eye irritation persists.**

First aid of ingestion
Ingestion of ink may cause stomach upset. Seek medical advice and then call the Hewlett-Packard Health effects line (above). **Seek medical attention if stomach upset persists.**

First aid for inhalation
Remove person affected to fresh air area.

5   Fire fighting Measures

Flashpoint:	Auto-ignition temperature:
Approximately 129 to 135 degrees F. No ignition, sustained combustion or flashing in the Sustained Combustability Test (method in US 49CFR173, Appendix H)	Not determined
Extinguishing Media: water, dry chemical, carbon dioxide, foam	**Special fire fighting procedures:** none
Unusual fire and explosion hazards: no special hazards shown	

6   Additional release Measures
Spill or Leak Procedures
No special procedures are indicated. Use absorbent towels to wipe up ink.
Rinse area with damp cloth to remove traces of ink.

7   Handling and Storage
KEEP OUT OF REACH OF CHILDREN

Storage Temperature: -40 to 70 degrees C	**Shelf Life:** 12 months
Handling and Storage precautions: Do not use	**Special Sensitivity:** none

inkjet cartridge when frozen. Ensure inkjet cartridge exterior is dry before inserting in printer.	

8   Exposure Control / Personal Protection

No special eye or skin protection is needed for cleanup of spills. Standard eye and skin protection for laboratory chemical safety is required.

9   Physical and Chemical Characteristics

Appearance: black liquid	**Physical State:** liquid at room temperature
Boiling Point: not applicable	
pH: 7.8 to 8.4	**Solvent content:** <20%
Solubility in water: soluble	**Vapor density:** >1 (air = 1.0)
Odor: not applicable	**Vapor pressure:** not applicable

10   Reactivity

Stability: stable under normal storage conditions	**Thermal decomposition products:** oxides of carbon, nitrogen and water
Incompatibilities: strong oxidizers	**Hazardous polymerization:** none

11   Toxicological Information

Refer to sections 3. Hazard Identification and 4.First Aid Measures.

12   Ecological Information

This ink complies with the requirements for the German Blue Angel Environmental Certifications for printers.

13   Disposal Considerations

Dispose in accordance with all applicable federal, state and local laws.

14   Transportation Information

Not a regulated article under DOT, IATA, ADT or RID.

15   Regulatory Information

According to EU Directive 88/379/EEC, this product is not classified as dangerous and therefore no hazard label is required. All ingredients are on the EINECS or ELINCS inventories.
For other countries, including the USA, no product label would be required.
TSCA Inventory: all components are listed.
TSCA Section 12(b) Export Notification required for Isopropyl alcohol (67-63-0), Traces of tetrahydrofuran (CAS. 109-99-9) and traces of triethylene glycol monoethyl ether (CAS. 112-50-5)
Proposition 65: Contains no substance known to be carginogen and/or reproductive toxicant by the State of California

16   Other Information

Date prepared: May 29 2001.

Disclaimer: This Product Safety Data Sheet is offered without charge to the customers of iSys – The Imaging Systems Group, Inc. Data is the most current known to Hewlett-Packard (iSys partner) at the time of preparation and is believed to be accurate. It should not be construed as a guaranteeing specific properties of the products as described or suitability for a particular application.

ADDENDUM 3

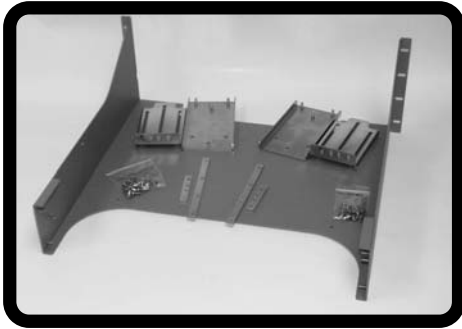## Rack mount Installation [Optional Kit Required]

- see accompanying pages for installation instructions for the three versions of rack mounting kits.

iTerra Lite *Thermal Inkjet Printer*

RACK MOUNT INSTALLATION GUIDE

KIT-IT8LRACK17 [for 17" depth racks]

Included in kit:

(1) Mounting Bracket, 19" width - Rack
(2) Nut Plate, Front
(2) Nut Plate, Rear
(1) Rear Support Bracket, Left
(1) Rear Support Bracket, Right
(14) #10-32 x 1/2" screw
(14) #10 external star washer
(4) #8-32 x 5/8" screw
(4) #8 external star washer
(6) #10 flat washer
(6) #10-32 nylon lock nut

Tools required:

#3 phillip screw driver
#2 stubby phillip screw driver
3/8" socket driver

1

Remove feet from iTerra Lite base.

2

Insert mounting bracket in rack unit (wide end is front of unit).

3

Insert nut plate front behind rack unit bracket.

4

(8) #10-32x1/2" screws & (8) #10 Star Washers. Attach screws on left and right sides of mounting bracket front. Do not tighten.

5

Attach rear support bracket with *(6) #10 flat washers & (6) # 10-32 nylon lock nuts.* Do not tighten.

6

(6) #10-32x1/2" screws & (6) #10 star washers. Insert nut plate back behind rack unit bracket and attach screws. Do not tighten.

7

Insert iTerra Llite Printer into rack mount and slide into place. Once in place tighten all screws.

8

Using the *(4) 8-32+5/8 screws & (8)* star washers attach printer to rack mount.

9

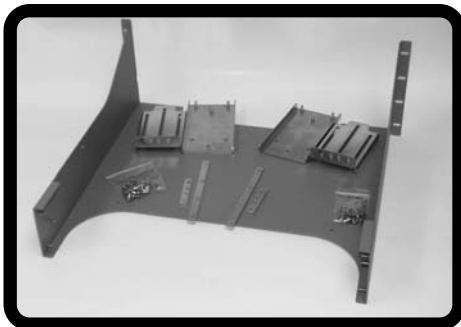Rack Mount Installed.

iTerra Lite *Thermal Inkjet Printer*
RACK MOUNT INSTALLATION GUIDE
KIT-IT8LRACK24 [for 21"-24" depth racks]

Have Questions? Contact us at:
1.866.415.iSys (4797)

**iSys**
The Imaging Systems Group Inc.

Rack Mount Installed.

Included in kit:

(1) Mounting Bracket, 19" width - Rack
(2) Nut Plate, Front
(2) Nut Plate, Rear
(1) Rear Support Bracket, Left
(1) Rear Support Bracket, Right
(14) 10-32 x 1/2" screw
(14) #10 external star washer
(4) 8-32 x 5/8" screw
(4) #8 external star washer
(12) #10 flat washer
(12) 10-32 nylon lock nut
(2) Extender

Tools required:

#3 phillip screw driver
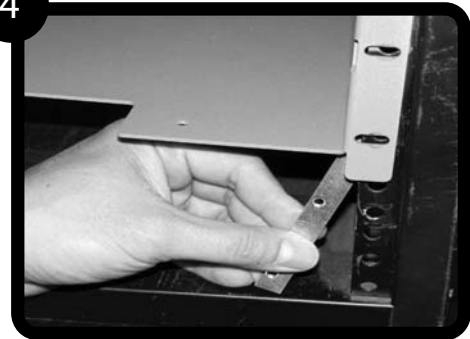#2 stubby phillip
screw driver
3/8" socket driver

1
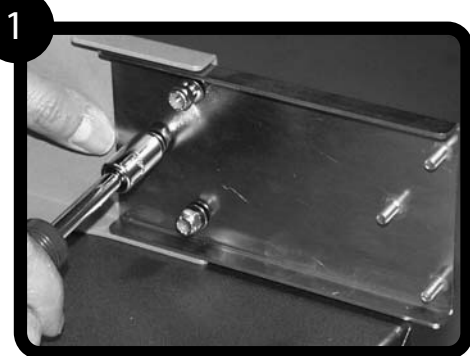
Install Mouting Bracket extenders on Mounting Bracket, *apply (6) flat #10 washers, (6) #10 nylon nuts.*

2

Remove feet from iTerra Lite base

3

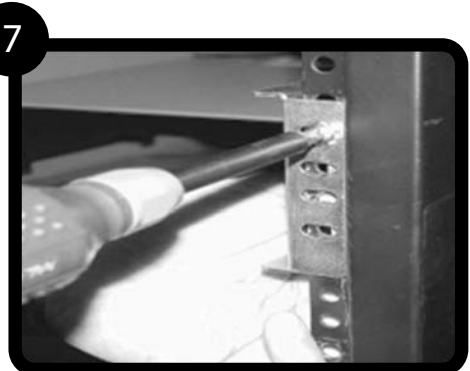Insert mounting bracket in rack unit (wide end is front of unit).

4

Insert nut plate front behind rack unit bracket.

5

(8) #10-32x1/2" srews & (8) #10 Star Washers Attach screws on left and right sides of mounting bracket front. Do not tighten.

6

Attach rear support bracket with *(6) #10 flat washers & (6) 10-32 nylon lock nuts.* Do not tighten.

7

(6) #10-32x1/2" screws & (6) #10 star washers. Insert nut plate back behind rack unit bracket and attach screws. Do not tighten.

8

Insert iTerra Llite Printer into rack mount and slide into place. Once in place tighten all screws.
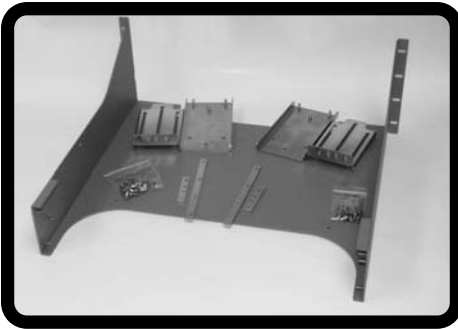
9

Using the *(4) 8-32+5/8 screws & #8 extra star washer* attach printer to rack mount.

iTerra Lite *Thermal Inkjet Printer*

RACK MOUNT INSTALLATION GUIDE

KIT-IT8LRACK30 [for 30" depth racks]
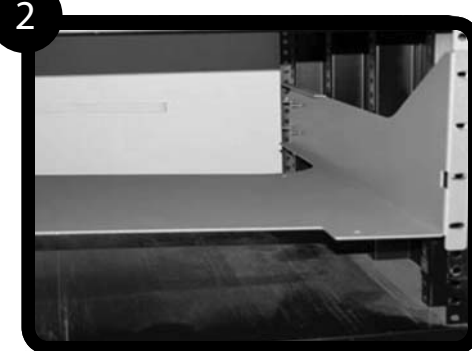
iSys
The Imaging Systems Group Inc.

Included in kit:
(1) Mounting Bracket, 19" width - Rack
(2) Nut Plate, Front
(2) Nut Plate, Rear
(1) Rear Support Bracket, Left
(1) Rear Support Bracket, Right
(14) #10-32 x 1/2" screw
(14) #10 external star washer
(4) #8-32 x 5/8" screw
(4) #8 external star washer
(6) #10 flat washer
(6) #10-32 nylon lock nut

Tools required:

#3 phillip screw driver
#2 stubby phillip screw
driver
3/8" socket driver

1
Remove feet from iTerra Lite base

2
Insert mounting bracket in rack unit
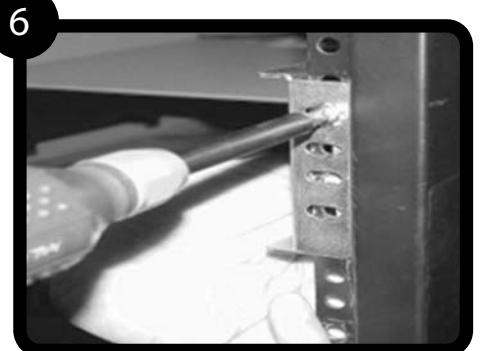(wide end is front of unit).

3
Insert nut plate front behind rack unit
bracket.

4
*(8) #10-32x1/2" screws & (8) #10 Star
Washers.* Attach screws on left and right sides
of mounting bracket front. Do not tighten.

5
Attach rear support bracket with *(6) #10
flat washers & (6) # 10-32 nylon lock nuts.*
Do not tighten.

6
*(6) #10-32x1/2" screws & (6) #10 star
washers.* Insert nut plate back behind rack unit
bracket and attach screws. Do not tighten.

7
Insert iTerra Llite Printer into rack
mount and slide into place. Once in place
tighten all rack mounting screws.

8
Using the *(4) 8-32+5/8 screws & (8)*
star washers attach printer to rack
mount.

9
Rack Mount Installed.