



User Manual

1330/1430+ Matrix Printer



Important Safety Instructions (English)

Read the following instructions thoroughly before starting up your printer.

- Never carry out maintenance or repair work yourself. Always contact a qualified service technician.
- Keep this Operator's Manual in a place which is easily accessible at all times.
- Place the printer on a solid and even base so that it cannot fall.
- Never place the printer in the vicinity of inflammable gas or explosive substances.
- Ensure the printer is connected to a socket with the correct mains voltage.
- Always disconnect the printer from the mains before opening the device to perform maintenance work or remedy errors.
- Do not expose the printer to high temperatures, direct sunlight or dust.
- Keep all liquids away from the printer.
- Protect the printer from shock, impact and vibration.
- Make sure that the printer and computer are switched off before connecting the data cable.
- The Print Head will become very hot during printing; avoid contact with the Print Head after printing has finished.
- Do not perform any operation or action in any way other than those provided in this manual. When in doubt, contact your dealer or your customer support.



The device and mains-socket must at all times be easily accessible.

Wichtige Sicherheitshinweise (German)

Lesen Sie bitte diese Sicherheitshinweise durch, bevor sie den Drucker in Betrieb nehmen.

- Führen Sie Wartungsarbeiten und Reparaturen keinesfalls selbst aus, sondern verständigen Sie immer einen qualifizierten Servicetechniker.
- Bewahren Sie diese Dokumentation an einem jederzeit zugänglichen Ort auf.
- Den Drucker auf stabilem und ebenem Untergrund so aufstellen, dass er nicht zu Boden fallen kann.
- Stellen Sie den Drucker keinesfalls in der Nähe von leicht entzündlichen Gasen oder explosiven Stoffen auf.
- Den Drucker nur an eine Steckdose mit der richtigen Spannung anschließen.
- Wenn Sie den Drucker vom Netz trennen wollen, den Drucker ausschalten und immer den Netzstecker an der Steckdose ziehen.
- Den Drucker weder hohen Temperaturen noch direktem Sonnenlicht und Staub aussetzen.
- Keine Flüssigkeiten mit dem Drucker in Berührung bringen.
- Den Drucker keinen Erschütterungen, Stößen oder Vibrationen aussetzen.
- Sicherstellen, dass der Drucker und der Computer ausgeschaltet sind, bevor das Datenkabel angeschlossen wird.
- Der Druckkopf wird während des Druckens heiß. Vor dem Berühren deshalb einige Zeit abkühlen lassen.
- Weichen Sie bei der Bedienung des Druckers nicht von den Anweisungen in der Dokumentation ab. Bei Unklarheiten wenden Sie sich bitte an Ihren Händler oder Ihren Kundendienst.
- Maschinenlärminformations – Verordnung – 3.GPSGV, der höchste Schalldruckpegel beträgt 70 dB(A) oder weniger gemäß EN ISO 7779.



Das Gerät und die Netzsteckdose müssen jeder Zeit leicht zugänglich sein.

Consignes importantes de sécurité (French)

Lire attentivement les instructions suivantes avant de mettre l'imprimante en service.

- Ne jamais effectuer soi-même les travaux d'entretien et de réparations. Contacter toujours un dépanneur qualifié.
- Placer l'imprimante sur un support stable de façon à ce qu'elle ne puisse pas tomber.
- Ne jamais placer l'imprimante à proximité de sources de gaz aisément inflammables ou de substances explosives.
- Ne connecter l'imprimante à une prise que lorsque la tension est correcte.
- Pour déconnecter l'imprimante de l'alimentation principale, mettre l'imprimante hors tension et toujours débrancher le connecteur secteur de la prise murale.
- Ne pas exposer l'imprimante à des températures élevées, à la lumière directe du soleil ou à la poussière.
- Ne pas mettre l'imprimante en contact avec des liquides.
- Ne pas exposer l'imprimante à des chocs, impacts ou vibrations.
- S'assurer que l'imprimante et l'ordinateur sont hors tension avant de connecter le câble de données.
- La tête d'impression est brûlante pendant l'impression. C'est pourquoi laissez-la refroidir quelques instants avant d'y toucher.
- N'exécutez aucune opération ni action d'une autre manière que celle indiquée dans ce manuel. En cas de doute, veuillez contacter votre distributeur ou service après-vente.



Le dispositif et la prise principale doivent toujours être accessibles facilement.

Indicazioni di sicurezza importanti (Italian)

Prima di mettere in funzione la stampante, leggere attentamente le seguenti indicazioni.

- Non eseguire mai da sé gli interventi di manutenzione e riparazione, ma rivolgersi sempre a un tecnico di assistenza qualificato.
- Conservare le presenti istruzioni per l'uso in un luogo sempre accessibile.
- Collocare la stampante su una superficie stabile, per evitare che cada a terra.
- Non collocare la stampante in prossimità di gas facilmente infiammabili o di sostanze esplosive.
- Collegare la stampante a una presa di corrente con tensione adeguata.
- Per scollegare la stampante dalla rete di alimentazione, spegnere la stampante e disinserire sempre il connettore di rete dalla presa.
- Non esporre la stampante ad elevate temperature né alla luce solare diretta e alla polvere.
- Evitare il contatto della stampante con liquidi.
- Non esporre la stampante a colpi, scosse o vibrazioni.
- Verificare che la stampante e il computer siano spenti prima di collegare il cavo di trasmissione dati.
- Durante la stampa, la testina si surriscalda notevolmente. Prima di toccarla, se necessario opportuno quindi lasciarla raffreddare qualche istante.
- Non eseguire alcuna operazione o azione se non nella maniera descritta nel presente manuale. In caso di dubbio, contattare il rivenditore o dalla società incaricata dell'assistenza.



Il dispositivo e la presa di corrente devono essere sempre facilmente accessibili.

Instrucciones de seguridad importantes (Spanish)

Lea las siguientes instrucciones con esmero antes de poner la impresora en servicio.

- Nunca lleve a cabo trabajos de mantenimiento o reparación Ud. mismo, sino consulte a un técnico de servicio calificado.
- Guarde las presentes instrucciones de servicio en un lugar de fácil acceso en cualquier momento.
- Ponga la impresora sobre un base estable de manera que no pueda caer al suelo.
- Nunca coloque la impresora en la vecindad de gases de fácil inflamabilidad o sustancias explosivas.
- Asegure conectar la impresora sólo a un enchufe con un voltaje correcto.
- Cuando quiera desconectar la impresora de la red, apague la impresora y siempre tire la clavija de alimentación del enchufe.
- No exponga la impresora a temperaturas altas, a la luz solar directa y al polvo.
- No ponga la impresora en contacto con fluidos.
- Nunca exponga la impresora a sacudidas, choques o vibraciones.
- Asegúrese de que la impresora y el ordenador estén apagados antes de conectar el cable de datos.
- La cabeza de impresión se pone muy caliente durante la impresión. Por lo tanto, deje enfriarlo algún tiempo antes de tocarla.
- No permita que se realice cualquier operación o acción de una forma diferente a lo que se señala en el manual. En caso de duda, póngase en contacto con su comerciante o con su servicio post-venta.



El dispositivo y la toma de corriente deben estar ubicados de forma que sea fácil acceder a ellos.

Правила по технике безопасности. (Russian)

Прочитайте, пожалуйста, инструкцию по технике безопасности перед включением в работу принтера.

- Не выполняйте технические работы и ремонт техники самостоятельно, но сообщайте о неисправностях квалифицированным сервисным техникам.
- Данная инструкция должна быть всегда доступна каждому пользователю.
- Установите принтер на ровном и стабильном месте так, чтобы он не смог упасть на пол.
- Ни в коем случае не ставьте принтер вблизи легко воспламеняющихся газов и взрывчатых веществ.
- Включайте принтер в розетку только с соответствующим напряжением.
- Если Вы хотите отключить принтер от напряжения, сначала выключите принтер сам и затем выньте штекер из розетки.
- Берегите принтер от нагревания, от попадания на него прямых солнечных лучей и пыли.
- Не допускайте попадания жидкости на принтер.
- Нельзя подвергать принтер тряске, ударам и вибрации.
- Убедитесь, что принтер и компьютер выключены, только после этого соедините принтер с компьютером.
- Печатающая головка нагревается во время работы принтера. Поэтому подождите какое-то время, прежде чем дотронуться до нее.
- Пользуйтесь принтером так, как это написано в документации. Если у Вас возникают неясности, обращайтесь с вопросами к Вашим продавцам или в сервисный центр.



Устройство и розетка должны быть всегда легко доступна.

Instruções Importantes sobre Segurança (Portuguese)

Leia as instruções de segurança antes de usar a impressora.

- Consulte sempre um técnico qualificado para executar uma reparação.
- Coloque a impressora sobre uma base sólida e nivelada, para que ela não sofra quedas.
- Jamais instale a impressora nas proximidades de lugares onde haja gás inflamável ou substâncias explosivas.
- Assegure-se de conectar a impressora à tomada elétrica com a voltagem apropriada.
- Quando desligar a impressora da rede, desligue sempre a impressora e retire o cabo da tomada.
- Não exponha a impressora a temperaturas altas ou luz solar direta.
- Não aproxime substâncias líquidas da impressora.
- Proteja a impressora de choques, impactos e vibrações.
- Desligue a impressora e o computador antes de conectar o cabo da rede.
- A cabeça da impressora pode ficar muito quente. Portanto, espere algum tempo antes de tocá-la.
- Não faça nenhuma operação ou ação além das recomendadas neste manual. Em caso de dúvida, contate seu revendedor ou companhia de serviço.



A impressora e a tomada devem ser facilmente em todos os momentos acessíveis.

Önemli Güvenlik Talimatları (Turkish)

Lütfen, yazıcıyı işleme geçirmeden önce bu güvenlik talimatlarını bütünüyle dikkatle okuyun.

- Bakım ve tamir çalışmalarını kesinlikle ve hiçbir surette kendi başınıza yapmayın; her zaman kalifiyebir uzman servis-teknisyenine haber verin.
- Yazıcıyı, üzerinden yere düşmesi mümkün olmayacak sabit ve düz bir zemine yerleştirin.
- Yazıcıyı kesinlikle ve hiçbir surette kolayca yanabilecek gaz veya patlayıcı maddeler içeren nesnelere yakınına koymayın.
- Yazıcı akım kablosunu sadece doğru gerilime sahip bir prize takın.
- Yazıcıyı şebeke ağından ayırmak istediğinizde, yazıcıyı kapatın ve ağ-fişini her zaman prizden çıkartın.
- Yazıcıyı ne yüksek ısı ne de doğrudan güneş ışığına ve toza mâruz kalan mekânlarda bulundurun.
- Yazıcı hiçbir sıvı maddeyle temasta olmamalıdır.
- Yazıcı hiçbir sarsıntıya, darbeye veya titreşime mâruz kalmamalıdır.
- Veri kablosu bağlanmadan önce hem yazıcının hem de bilgisayarın kapalı olduklarından emin olmalısınız.
- Yazıcının başı basma esnasında yüksek ısıya ulaşır. Bu yüzden lütfen dokunmadan önce kısa süre soğumasını bekleyin.
- Yazıcının işletimi ve kullanımında bu dokümantasyondaki talimatların hiç dışına çıkmayın. Sorunlu görülen hususlarda lütfen imâlatçınıza veya müşteri hizmetleri servisimize başvurun.



Cihaz ve elektrik prizinin her zaman kolayca erişilebilir olması gerekir.

TRADEMARK ACKNOWLEDGEMENTS

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Approvals



This device fulfils the European standards requirements by complying with the Directive relating to electromagnetic compatibility and relating to low-voltage electrical equipment. Furthermore, it fulfils the requirements for RoHS and RED if applicable.

Conformity with the above-mentioned Directives is indicated by the CE symbol attached to the device.

Note: Conformity may be affected by:

- using interface cables not complying with the specifications
- non-observance of important instructions in the operator’s manual
- installing components not approved for this device by the manufacturer
- unauthorized manipulation



Dieses Gerät erfüllt die Anforderungen der Europäischen Normen durch Einhaltung der Richtlinien bezüglich der Elektromagnetischen Verträglichkeit sowie bezüglich Elektrischer Betriebsmittel mit Niederspannung. Des Weiteren werden die Anforderungen bezüglich RoHS und falls anwendbar RED erfüllt.

Die Konformität zu den oben angeführten Richtlinien ist durch das am Gerät angebrachte CE-Zeichen gekennzeichnet.

Hinweis: Die Konformität kann beeinflusst werden durch:

- Benutzung von nicht spezifizierten Schnittstellen
- Nichtbeachtung wichtiger Hinweise der Bedienungsanleitung
- Ersetzen von Bauteilen, die nicht vom Hersteller für dieses Gerät freigegeben wurden
- Eingriffe durch Unbefugte



This device complies with the requirements of the United Kingdom (UK) legislation of Electrical Safety Regulations, Electromagnetic Compatibility Regulations, if applicable the Radio Regulations and the Restriction of the Hazardous Substances in Electrical and Electronic Equipment Regulations.






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Symbol Description

The symbols in this manual are identified by their level of importance, as defined below. Read the following carefully before handling the product.

	CAUTION: Provides information that must be observed to prevent damage to the equipment or data loss .
	NOTE: Advises you of information that is essential to complete a task.
	CAUTION: Keep your body away from moving part.
	CAUTION: Hot ! Do not touch the parts till the printer has been switch off in half hour, otherwise it will hurt your fingers.
	CAUTION: Sharp edges, do not touch.

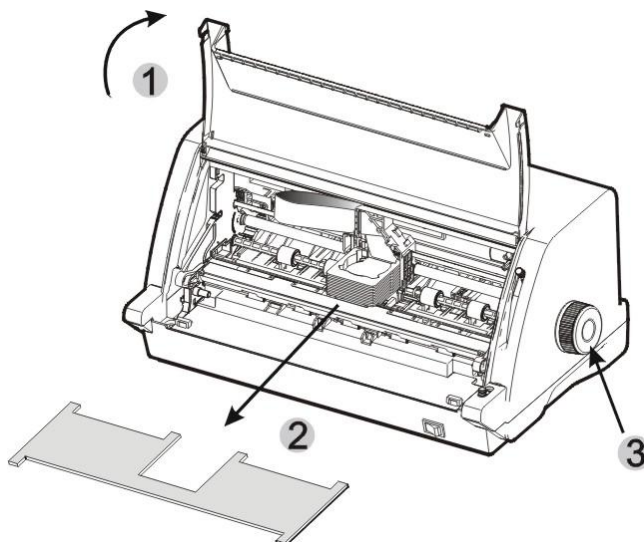
1 Unpacking Guide

1.1 Unpacking the Printer

1. Place your packaged printer on a solid base.
2. Make sure that the “Up” symbols point in the correct direction.
3. Open the packaging, lift the printer out of the cardboard box and remove the remaining packaging material.
4. Check the printer for any visible transport damage and missing items. If you find any transport damage or if any accessories are missing, please contact your dealer. The following items should be included:
 - Printer
 - Paper Feed Knob
 - Sheet Feeder
 - Power Cord
 - Ribbon Cartridge
 - Installation Guide
 - USB cable

Remove the packaging materials from the printer as follows:

1. Open the Front Flap of the printer.
2. Remove the shipping cardboard protecting the Print Head.
3. Install the Paper Feed Knob.



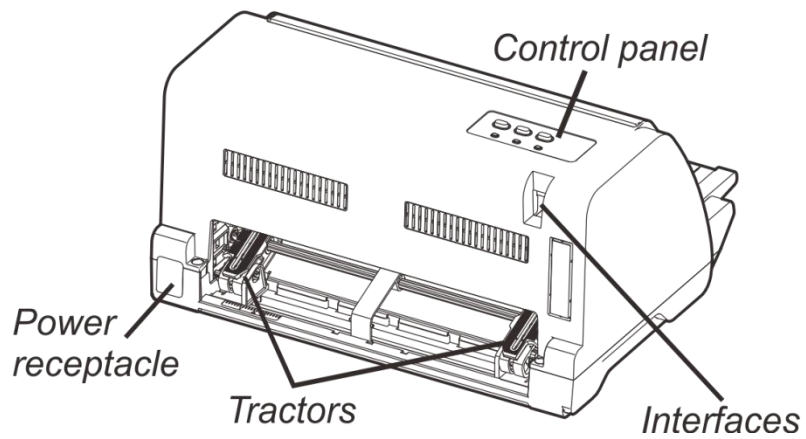
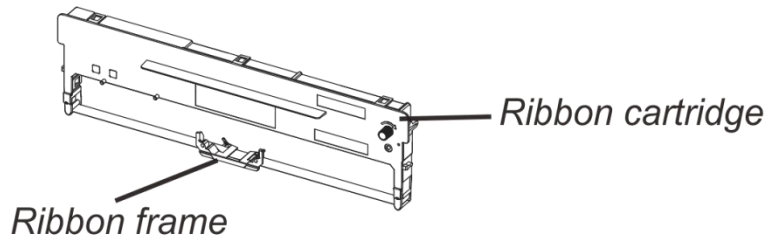
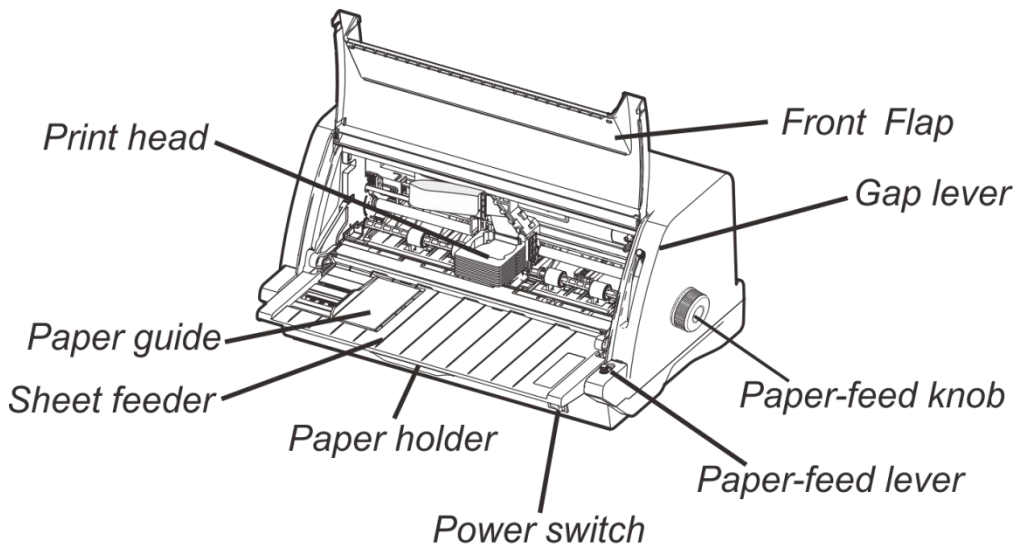
1.2 Placing the Printer



Place the printer on a solid, flat, and stable surface. Clear the spaces around the printer for ventilation, accessing the control panel, installing the paper, and collecting the print out.

When selecting the printer location, observe the following additional instructions:

1. Never place the printer near to any flammable gas or explosive substances.
2. Do not expose the printer to direct sunlight. If you cannot avoid placing the printer near a window, protect it from the sunlight with a curtain.
3. When connecting a computer to the printer, make sure the maximum recommended cable length is not exceeded.
4. Ensure sufficient distance between the printer and any heating devices/radiators.
5. Avoid exposing the printer to extreme temperature or air humidity fluctuations. Avoid exposure to dusty environments.
6. It is recommended the printer is installed in a position which reduces noise exposure to the work place during printing.
7. The socket-outlet shall be installed near the equipment and shall be easily accessible.

1.3 Printer Components



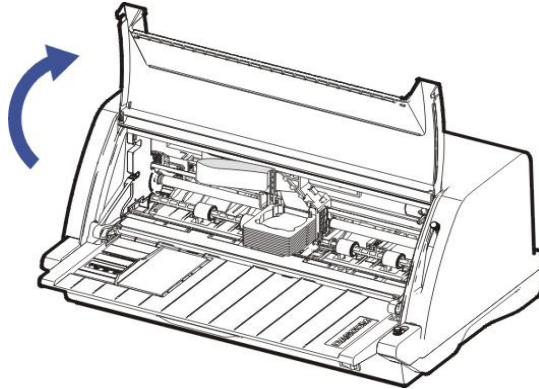
Component	Function
Front Flap	Protects the Print Head and other parts inside, and reduces noise.
Paper Guides	Adjusts the position of a cut sheet.
Sheet Feeder	Supports the cut sheet so as to ensure the paper in and out easily.
Paper Holder	Extended support for large size cut sheets.
Print Head	24-pin printing mechanism.
Head Gap Lever	Adjusts the gap between the Print Head and various form thickness.
Control Panel	Shows printer status, for printer setup.
Paper Feed Lever	Two positions:  =continuous forms;  = single sheet paper
Paper Feed Knob	Manual adjusts the vertical position of the paper.
Power Switch	Powers the printer ON or OFF.
Ribbon Cartridge	Holds inked Ribbon in it.
Ribbon Guide	Guides Ribbon installation on the Print Head.
Tractors	For feeding and adjustment of continuous forms.
Power Cord	Connects the printer and power socket.
Interface	Connects interface cable from the host.


2 Setting Up Printer

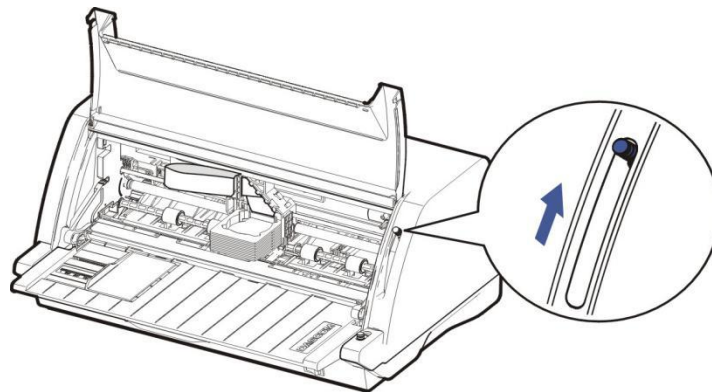
2.1 Install Ribbon

i Switch printer off during Ribbon installation.

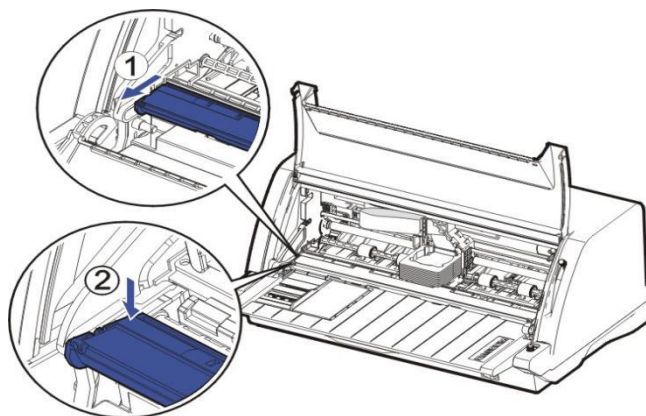
1. Open the Front Flap as shown in below picture.



2. Raise the Head Gap Lever to the top most position, labeled “”.

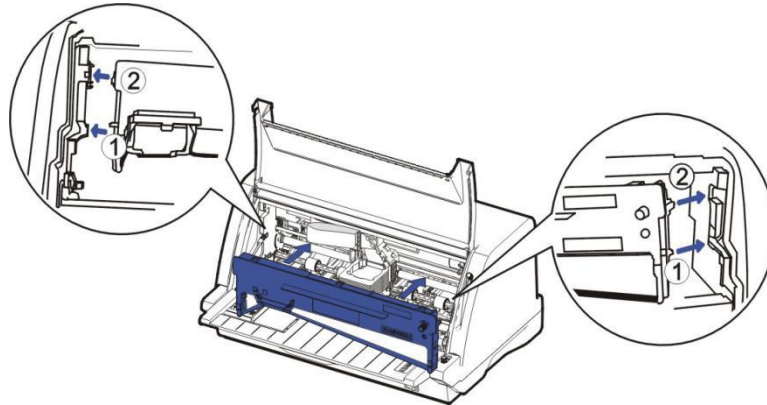


3. Pull the Upper Friction Frame ① and then lock it ② in place to the side plates.

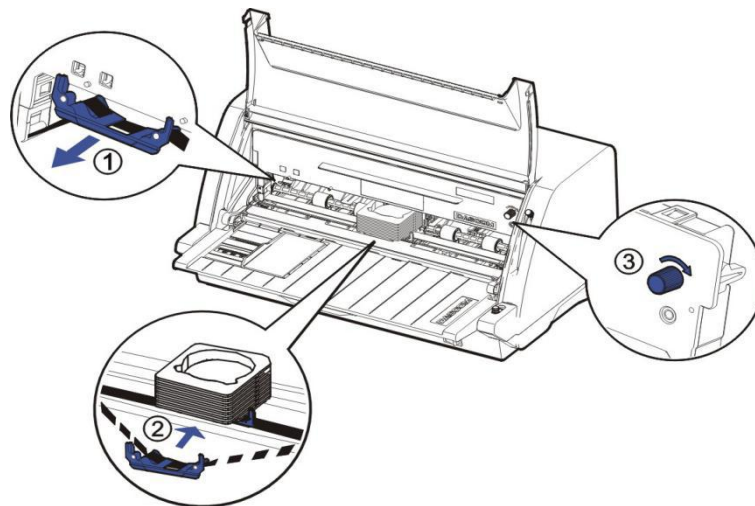


4. Carefully move the Print Head to the center.

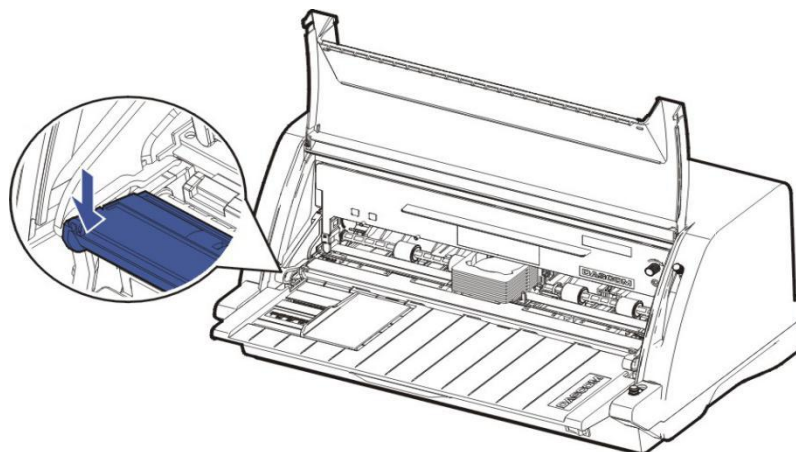
5. Tilt the Ribbon Cartridge a bit and match it to the positions ① and ② on both ends.
6. Then slightly press it down to hold it in place to the mentioned positions.



7. Hold the Ribbon Guide ① on the Ribbon Cartridge. Guide ② it onto the Print Head. Then turn the Ribbon Knob in clockwise direction until the ribbon fabric is taut. Move the carriage left and right to make sure the ribbon fabric is taut.



8. Release the front of Upper Friction Frame to its original position.




9. Lower the Head Gap Lever to the right scale according to the paper thickness.

10. Close the Front Flap to reduce printing noise and prevent dust going into the printer. Open it only for ribbon installation and adjustment.



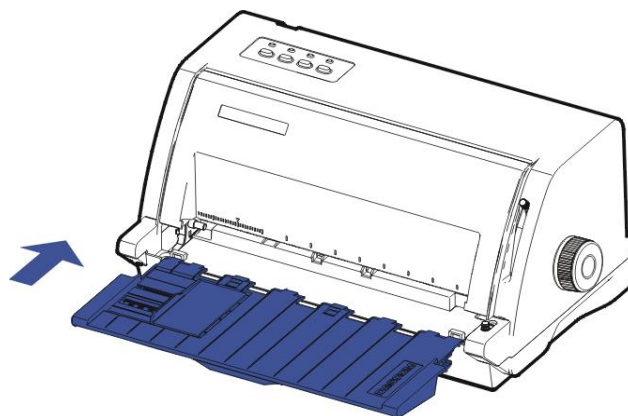
Notes on Ribbon Cartridge Removal:

- 1) Clear the paper in the printer.
- 2) Turn off the printer power.
- 3) Set the Gap Lever to the top most position, labeled “”.
- 4) Open the Front Flap.
- 5) Let the Print Head cool down, if necessary. Move the carriage to the middle.
- 6) Pull out the blue Ribbon Guide from the Print Head.
- 7) Hold the handle bar on the Ribbon Cartridge and pull the cartridge towards you to unlatch it. Some force may be needed to unlatch the cartridge.
- 8) Remove the ribbon fabric from the Print Head carefully without entangling it.

2.2 Install the Sheet Feeder

As shown in the picture, ensure the Sheet Feeder fingers fit into the slots of the printer. Push in the Sheet Feeder until its sides latch on the fixed bolts in the printer. The Sheet Feeder is now installed successfully.

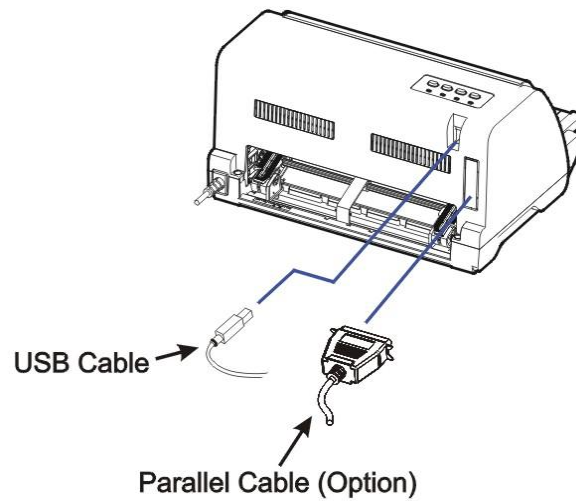
To remove the Sheet Feeder, use one hand to hold the printer and the other hand to pull and unlatch the Sheet Feeder.



2.3 Connecting the Interface Cable

The USB port is located at the rear of the printer.

IMPORTANT: Make sure the printer and the computer are switched off before connecting or disconnecting the interface cable to prevent electrical damage to the interface ports.

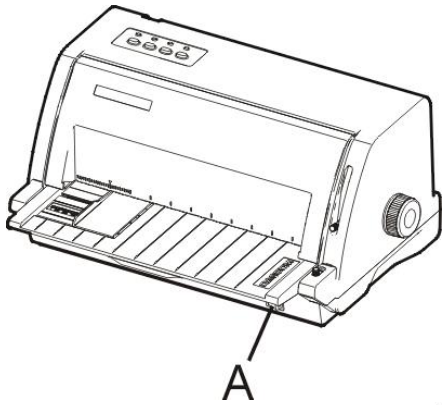


The printer may also be purchased with an additional interface. The additional interface can be one of the followings: **Parallel, Serial, Ethernet, WIFI or Bluetooth.**

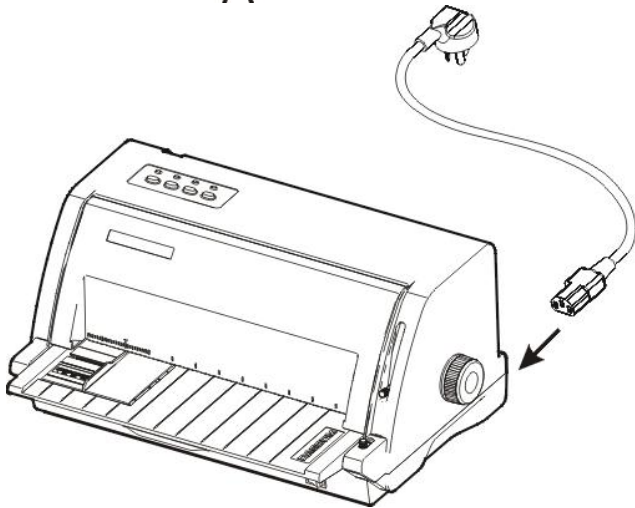
2.4 Connecting the Mains Power

STOP Make sure that the device has been set according to your country's power supply voltage. To do this, check the rating plate at the back of the printer. Contact your dealer if the setting is incorrect.

i Never switch on the printer if the voltage setting is incorrect; this may result in electrical damage to the printer.



Make sure that the power switch "A", located to the right side of the printer, is in the "O" (Off) position.



Connect the Power Cord to the power inlet of the printer. Connect the Power Cord plug to a mains socket. Switch on the printer.

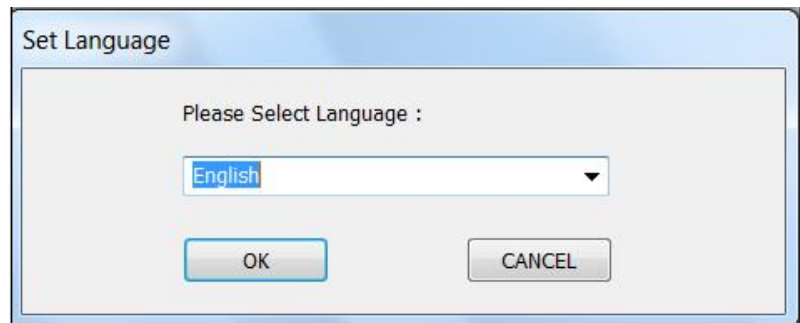
2.5 Installing the Windows Driver

The driver is the connection and transformation platform between the printer and the computer operating system to achieve the interactive processing of the information. User can set up relevant settings, get print status and etc. via driver.

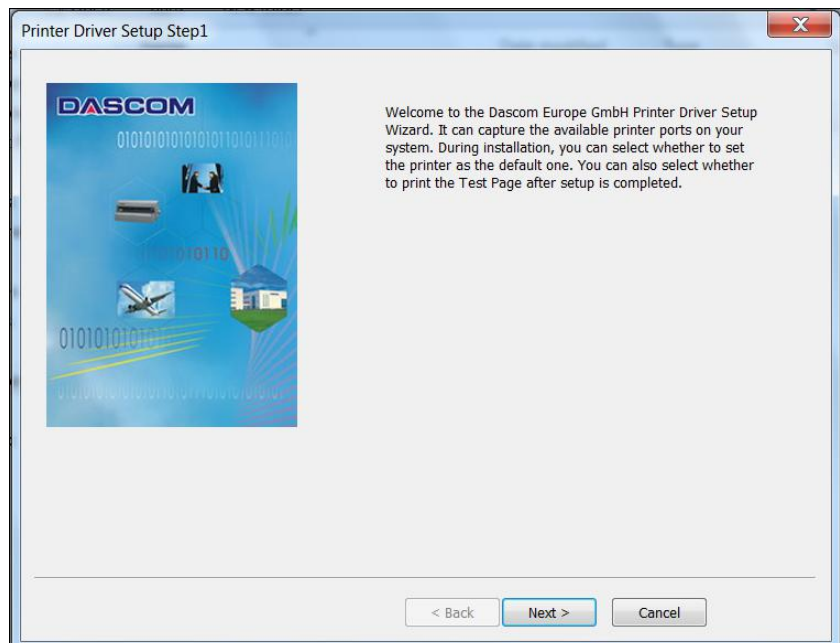
The latest Windows printer drivers can be downloaded from our web:

<https://www.dascom.com/downloads.html>

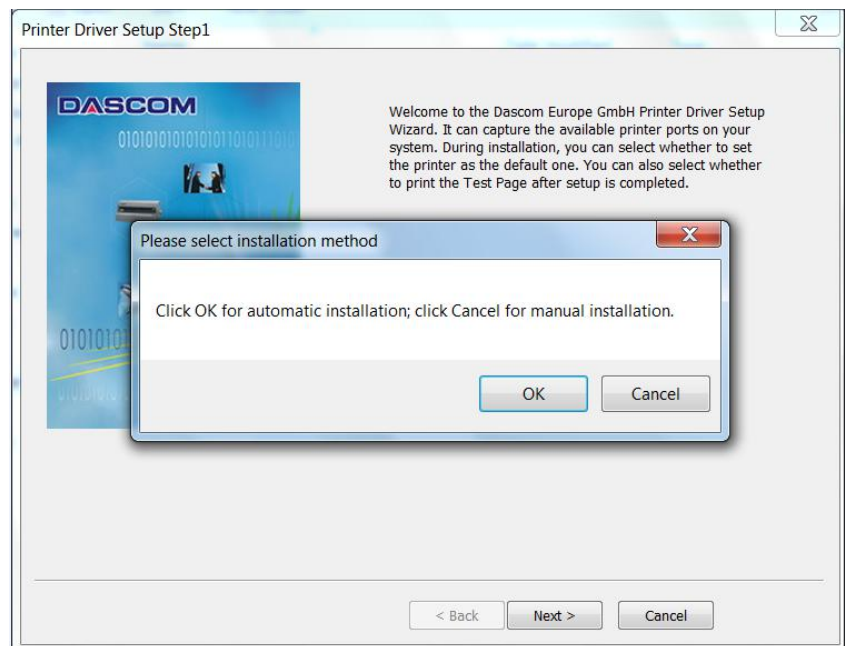
1. Go to the Drivers folder and run the Installer “DriverSetup.exe”. You will see the screen on the right. Select language, and click “Next” to continue.



2. A picture shown on the right side appears. Click “Next” to continue.

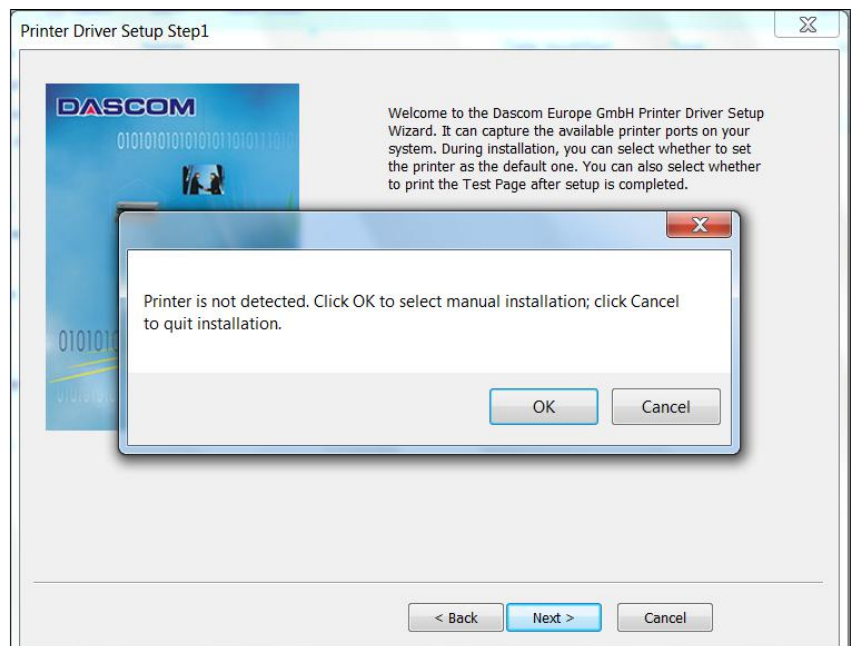


3. As shown in the picture on the right side, click “OK” to select automatic installation and click “Cancel” to select manual installation.

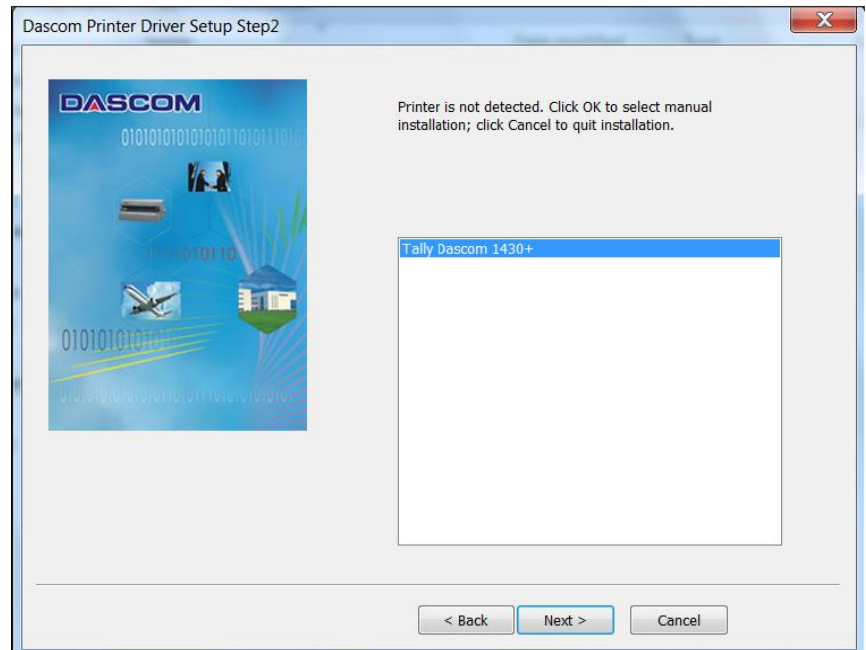


i If you have selected automatic installation in the third step, please refer to following three steps:

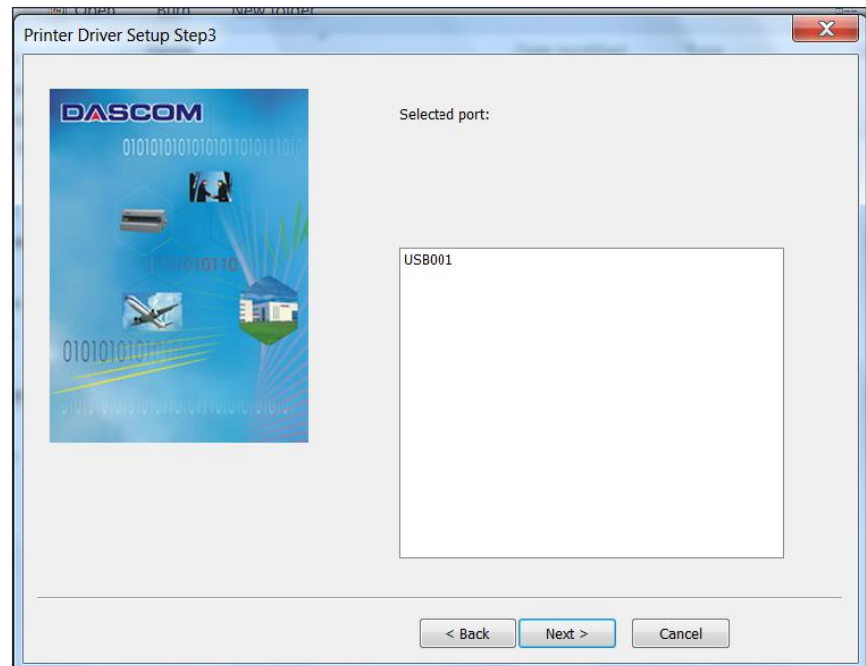
1) If you want to select automatic installation, make sure that the printer is connected with USB cable and power on. If the printer is not connected with USB cable or power off, a prompt on right side will appear if you select automatic installation. Click “OK” to select manual installation and click “Cancel” to cancel installation.



2) If automatic installation is selected and the printer is connected with USB cable and power on, the printer model will be detected automatically. As shown in picture on the right side, click "Next" to continue.

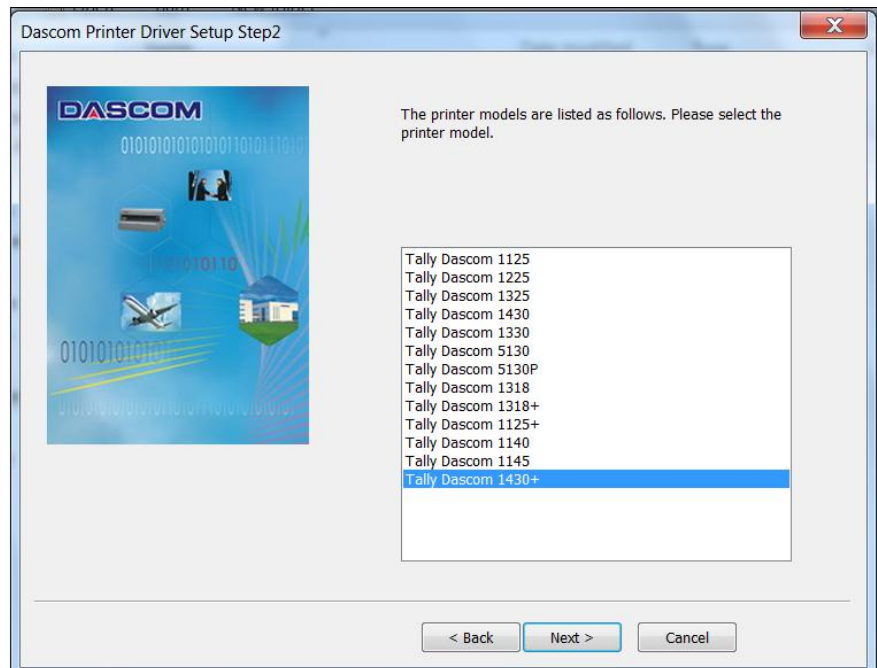


3) As shown in picture on right the side, USB port will be detected automatically. Click "Next" to continue.

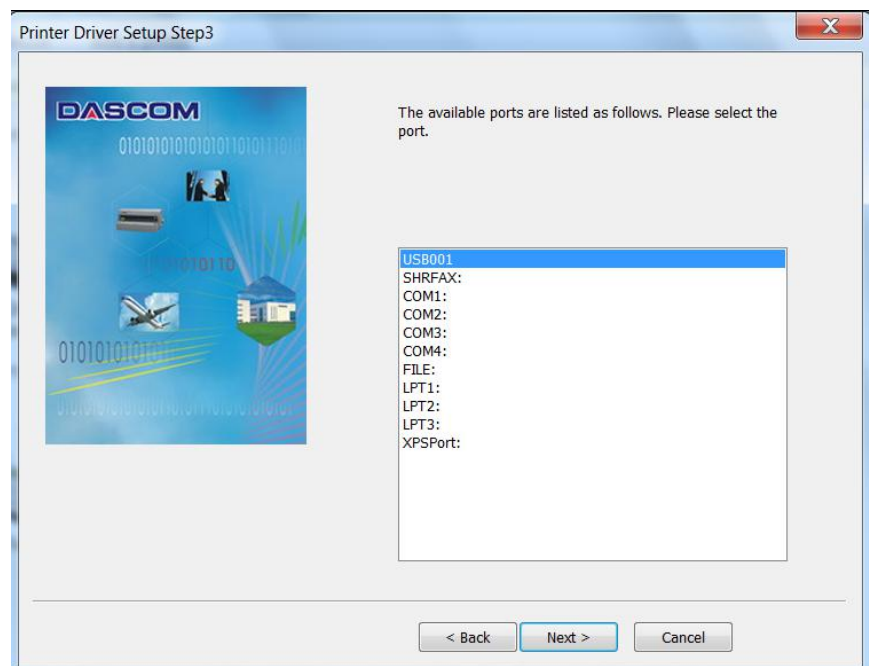


i If you have selected manual installation in the third step, please refer to following two steps:

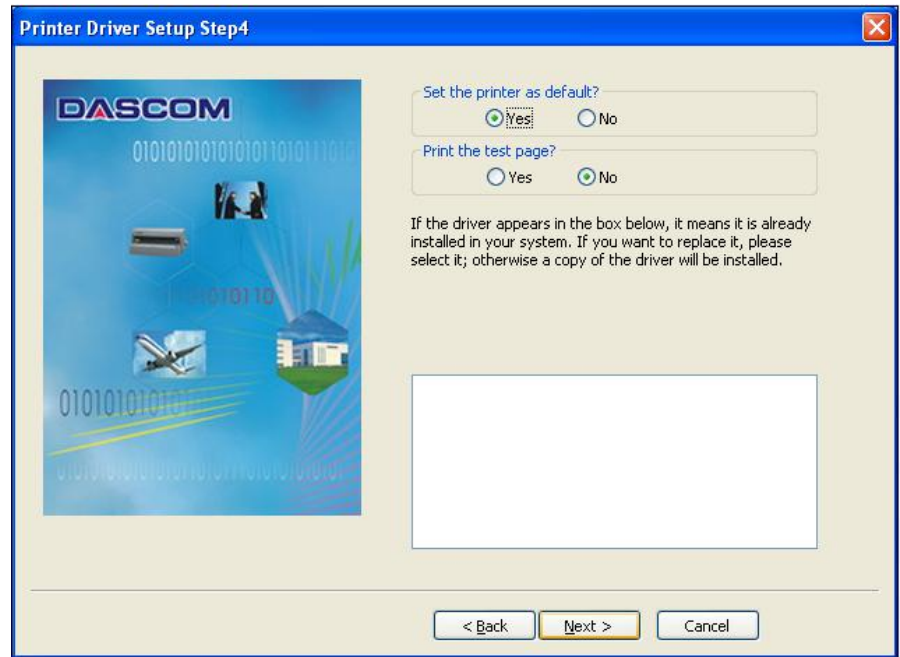
1) If manual installation is selected, picture on right side will appear after you click "Cancel". Select the desired printer model and click "Next" to continue.



2) Picture on the right side will appear after you click "Next". Select installation port and click "Next" to continue.



4. Here you can choose whether to set the driver as the system default driver, and whether you want to print the Test Page after installation is completed. Click "Next" to continue.



5. As shown in the picture on right side, click "Finish".

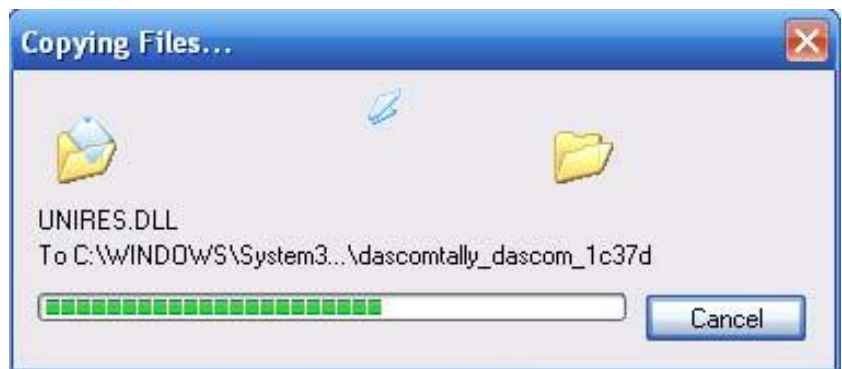


i For XP system, the following situation may appear after you click “Finish” in above step:

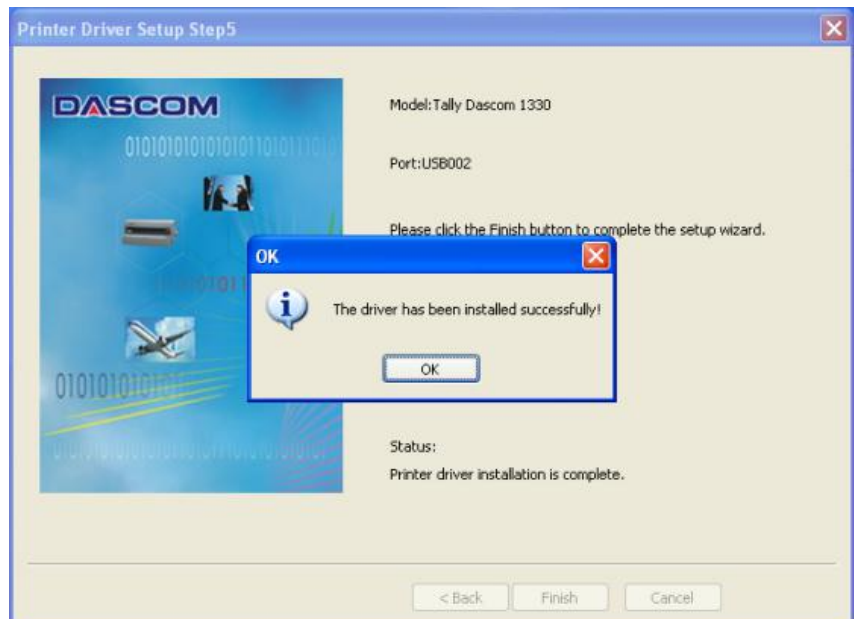
1) If the driver is not yet Microsoft Certified, the message on the right would appear. Click “Continue Anyway”. (As we continue to expand our product portfolio, not all of our drivers may be certified yet. Please check our website www.dascom.com for the latest certified drivers.)



2) Installation in progress.



6. After installation is completed successfully, you will see the message on the right.



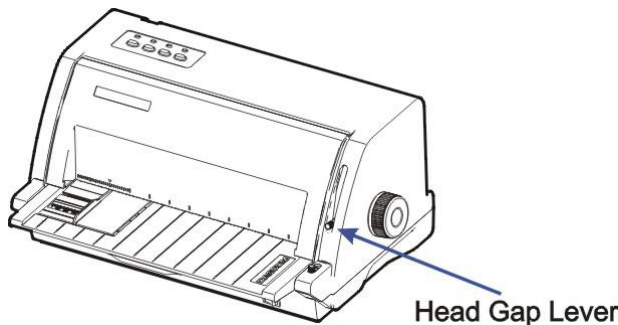
3 Paper Installation

The printer can handle either single sheets or continuous forms. Single sheets, also called cut sheets, include envelopes or non-continuous (single or multipart) forms. Continuous forms include labels and multipart forms fed into the printer using the stationery tractors. The printer is capable of printing up to original + 6-ply multipart paper.

i To ensure the print quality and protect the Print Head, set a proper print gap by the gap lever (see 3.1) for the form thickness and do not load folded, damaged, wrinkled, or curled paper. Remove any paper clip or staple.

3.1 Adjusting Print Gap

Sliding the Head Gap Lever on the right side up and down can increase and reduce, respectively, the print gap to support various form thickness.



Setting a wrong print gap may cause print head damage and shorten the head life.

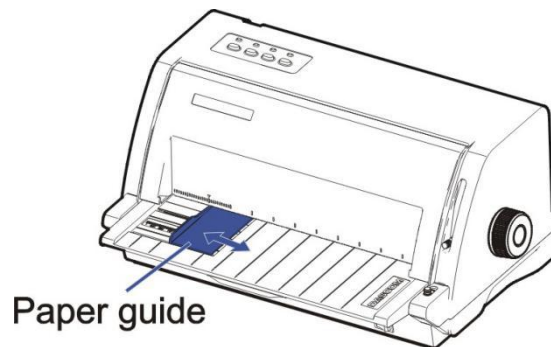
Paper type	Weight (g/m2) / ply	Thickness (mm)	Gap lever position
1~2 plies	52~100	0.06~0.16	1/2
3~4 plies	40~55	0.17~0.24	3/4
4~5 plies	40~55	0.25~0.30	4/5
5~6 plies	40~55	0.31~0.36	5/6
6~7 plies	40~55	0.37~0.42	6/7
Over 7 plies	40~55	0.43~0.48	7...
Thick paper	—	0.49~1.0	A/ B/ C
Change ribbon	—	—	

The “” position is only for unloading or installing the ribbon. When the lever is set higher than appropriate, it will result in poor print. Improper head gap setting shortens the ribbon and head life.


3.2 Handling Cut Sheet

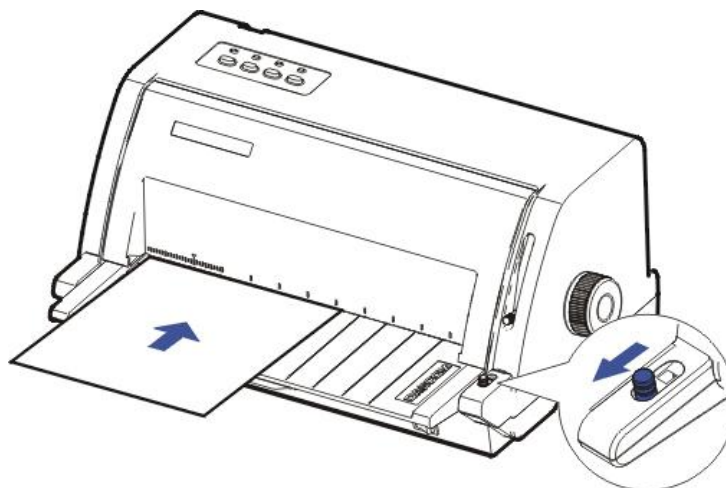
The front friction path supports the printing on single or multi-ply cut sheets loaded manually. Use the rear tractors for continuous forms.

1. Select the eject direction to the front or to the rear through the Printer Setting/Menu.
2. Slide the Paper Guide to set an appropriate left margin



Loading Cut Sheet

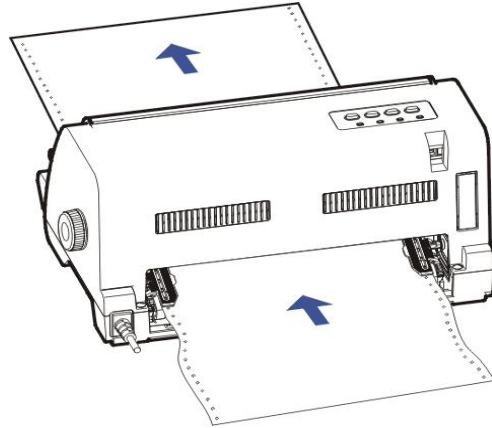
1. Turn off the power.
2. Slide the Paper Guide to set the desired left margin.
3. Turn on the power. **【The Power/Paper out LED】** blinks to indicate out of paper status.
4. Slide the Paper Feed Lever to the  position.
5. Manually insert a piece of cut sheet into the slot above the Sheet Feeder. The printer then loads the paper to its TOF position (the first print position) and lights up the Online LED, indicating the ready state.




3.3 Handling Continuous Forms (Fanfold)

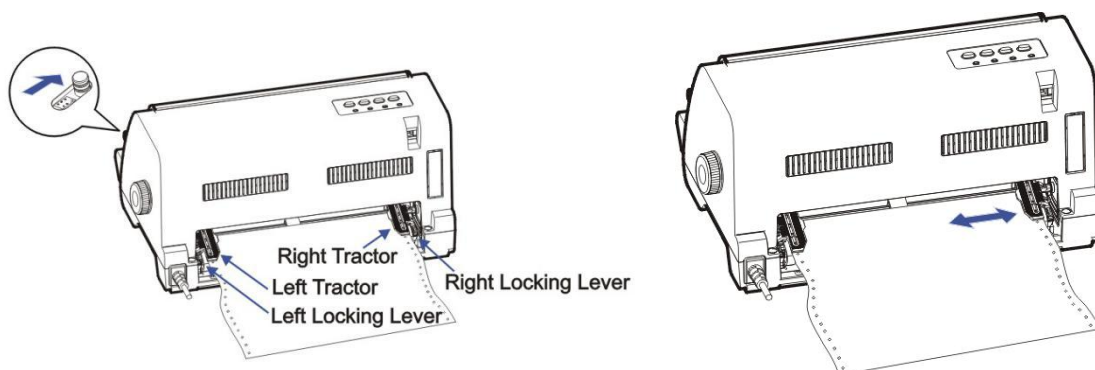
The 1330 printer can handle continuous form of width up to 10 inches, loaded by the rear Tractors as shown in the diagram.

The 1430+ printer can handle continuous form of width up to 12 inches, loaded by the rear Tractors as shown in the diagram.




Loading Continuous Form

1. Turn off the power.
2. Keep a stack of fanfold at a height below the Tractors.
3. Slide the Paper Feed Lever to the  position.
4. To set the desired left margin and form width, disengage the Tractor Locks to allow free movement of the Tractors.
5. When the left margin is set, tighten the Left Lock (viewed from rear). Raise the Tractor Doors and fit the first 3 paper holes onto the Left Tractor Pins. Close the Left Tractor Door. In the same way, install the paper on the right tractor. Ensure the paper is flat and smooth before tightening the Right Tractor Lock.



6. Double check if the paper holes properly fit in the Tractor Pins. Improper installation may cause paper jam and damage the printer.
7. Turn on the power. The **【Power/Paper out】** LED blinks to indicate out of paper status.
8. Press the **【Load/Eject】** key to load the paper to its TOF position. The **【Online】** LED lights up to indicate the ready state.


3.4 Switching To Cut Sheet From Fanfold

1. When the printer is offline (see Chapter 4), press the **【Load/Eject】** key to clear the fanfold out of the Platen to allow cut sheet operation.
2. Follow the below procedures to change to cut sheet operation from tractor mode:
 - If the printer is online, press the **【Load/Eject】** key to feed the fanfold to its tear-off position. Tear off the page.
 - Press the **【Online】** key once to set the printer offline. Press the **【Load/Eject】** key to withdraw the fanfold out of the Platen.
 - Slide the Paper Feed Lever to the  position. Then follow the procedures in Section 3.2 for cut sheet operation.

i The printer will signal an alarm if you change the Paper Feed Lever position while paper still remains in the printer.

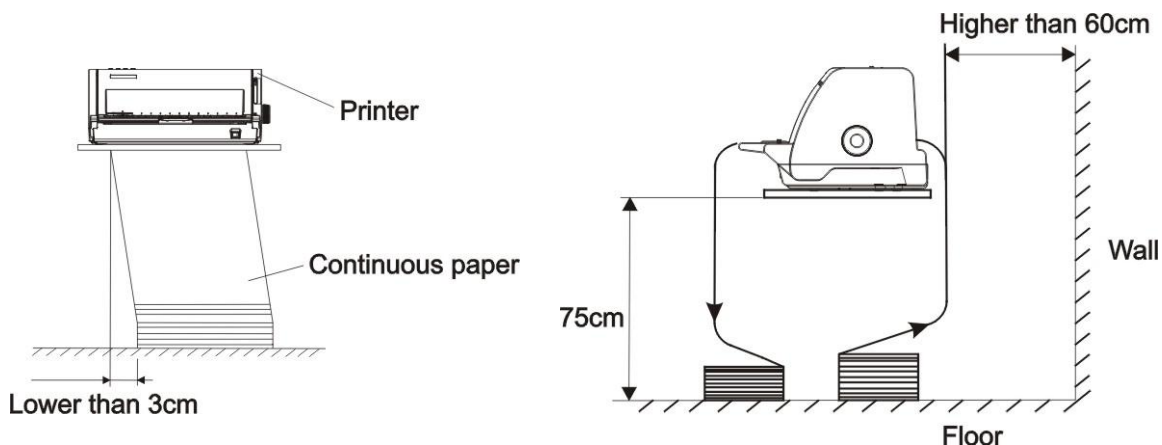
3.5 Switching To Fanfold From Cut Sheet

To re-load the parked continuous form:

1. Clear the cut sheet from the Sheet Feeder by pressing Exit key.
2. Slide the Paper Feed Lever to the  position.
3. Set the printer to offline. Press the **【Load/Eject】** key to re-load the parked fanfold.

3.6 Setting Fanfold Relative To Printer

1. It is recommended to place the printer 75 cm above the floor.
2. Keep the stack of fanfold less than 3 cm side ways off from the printer.



3. The printer should sit on a pedestal or a table without blocking the paper feeding and stacking. Keep the printer more than 60 cm away from the back wall.



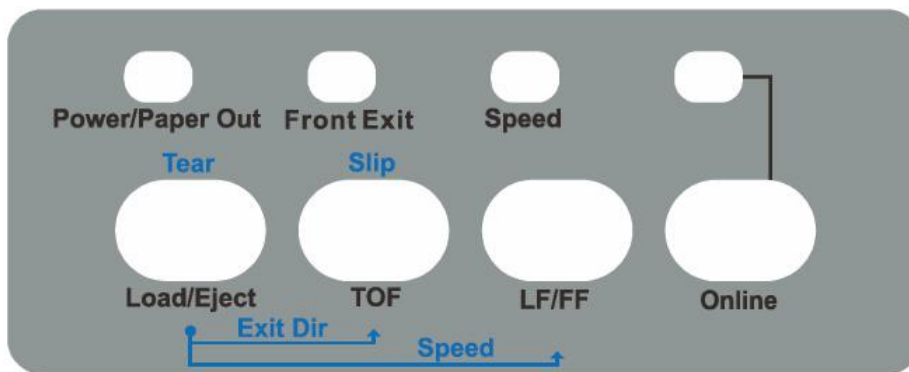
- 1) **Never place the printer next to any flammable gas or explosive substances.**
- 2) **Do not expose the printer to direct sunlight.**
- 3) **The interface cable should not exceed the recommended length, see specification.**
- 4) **Ensure sufficient distance between the printer and any heating devices/radiators.**

4 Control Panel Operation

General functions for the keys are clearly designated on the Panel label. Some other special settings need pressing multiple keys simultaneously or holding some keys when powering on the printer. This Chapter will describe the functions of the keys and display on the Panel.

4.1 Keys and LEDs

There are 4 keys on the Control Panel, from left to right: **【Load/Eject】**, **【TOF】**, **【LF/FF】**, and **【Online】** keys. Meanwhile, there are 4 LEDs, from left to right: **【Power/Paper out】**, **【Front Exit】**, **【Speed】**, and **【Online】** LEDs. The Control Panel is shown as below:



Below describes the function of each key/indicator:

Indicators

1. **【Power/Paper out】** **On** when the printer is powered on; **Off** when the printer is switched off; **Blinking** when out of paper.
2. **【Front Exit】** **On** to indicate cut sheet exit at the front after printing; **Off** to indicate cut sheet exit at the rear.
3. **【Speed】** **On**, **Off**, or **Blinking** when the test print quality is **NLQ**, **LQ** or **Draft** respectively.
4. **【Online】** **On** when the printer is active to receive and print data from the host; **Off** when it is offline.

Keys

1. **【Load/Eject】**

This key either loads a paper from the active source or clears the paper out of the Platen.

- 1) **Cut sheet**: Only when **Single Auto Loading** is disabled in **Paper Setup** (see section 5.3), you have to press this key to load a cut sheet. By default, a cut sheet comes out from the front.
- 2) **Tractor mode**: Only when **Fanfold Auto Loading** is "No" in **Paper Setup** (see section 5.3), you have to press key to load a fresh continuous form. When paper exists on the Platen, this key may have two effects:
 - It clears the continuous form out of the Platen and keeps it in the tractors.

- It reverses the continuous form to its TOF position if it is originally at the tear-off position.

2. **【TOF】**

Holding down this key starts to reverse the paper at Mirco Feed mode. Release the key to stop the reverse action.

3. **【FF/LF】**

When the printer is online or offline, a press on this key moves the paper forward by one line. If in tractor mode, holding this key will start with a few lines fed and then perform a form feed. If the fanfold is currently at the tear-off position, pressing this key will reverse the paper to its TOF position.

4. **【Online】**

1) The printer can be set online or offline by this key.

When the printer is at online state, press this key one time to switch the printer to offline; meanwhile, the **【Online】** LED is off. Press this key again to switch the printer back to online again, and the **【Online】** LED is on.

2) Out of paper, indicated by blinking **【Power/Paper out】** LED, causes the printer offline. Re-loading the paper, the printer automatically goes online with the **【Power/Paper out】** LED on. If the loaded paper is at the tear-off position, pressing this key again will reverse the paper to its TOF position.

4.2 Panel Operations

The same key is assigned with different functions depending on the states of operation, namely: **Online**, **Offline**, **Common Settings**, and **Power-On**.

1. **Online:** The **【Online】** LED lights up to indicate the printer is online, which is the normal operation state for printing. A press on the **【Online】** key toggles the printer between Online and Offline states.
2. **Offline:** The **【Online】** LED turns off to indicate the printer is offline, a state that the printer pauses to receive data from the host computer.
3. **Common Settings:** The panel operations described in Section 4.5 is valid in both the online or offline states.
4. **Power-On:** To enter the Power On state, the user holds down a key or a combination of keys while powering up the printer.

4.3 Online State

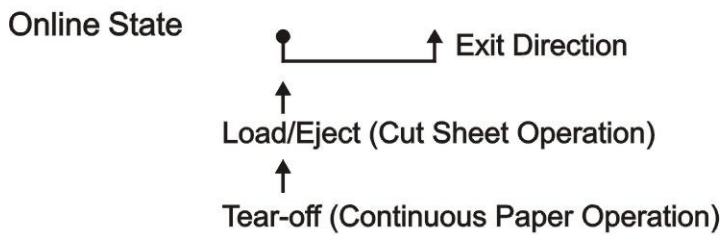
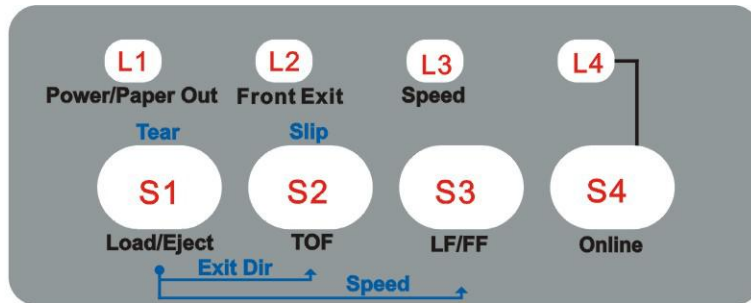
i Sections 4.3 to 4.7 describe the panel operations in details with the following legends:

[A] = press and hold key A

{B} = press and then release key B

[A] + {B} = press key B while holding A

[A]→ {B} = hold then release key A; next a press on key B

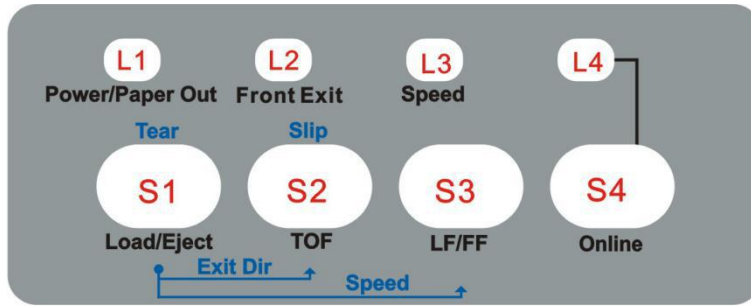


Remark : ● Hold ↑ Press

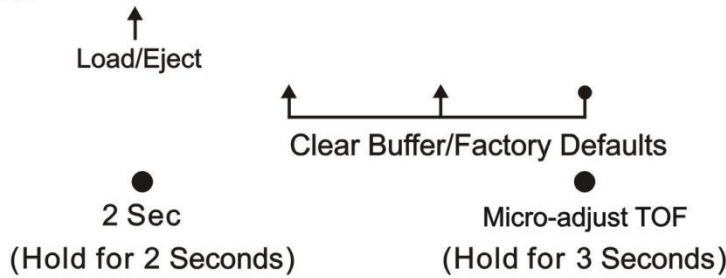
Function Name	Key	LED	Function Description
Eject cut sheet			<ul style="list-style-type: none"> ● Cut sheet mode: Clears the cut sheet from the Platen in the direction specified by the Exit Direction setting in Section 5.3.
Tear-off fanfold	{S1}	-	<ul style="list-style-type: none"> ● Tractor mode: Feeds the form to its tear-off position. A new print job or pressing this key again to move the fanfold to the next TOF position. <p>Note: Please refer to the Tear setting in Section 5.3 for Auto and Manual Tear-off.</p>
Eject Direction (cut sheet only)	[S1] + {S2}	L2 = ON: Out to front	<p>By pressing the [TOF] key while holding the [Load/Eject] key can toggle the eject direction for cut sheets.</p> <p>The [Front Exit] lights up to indicate cut sheets ejected to the front.</p>

i **NOTE:** Section 4.5 lists out additional operations while the printer is online

4.4 Offline State



Offline State



Remark : ● Hold ↑ Press

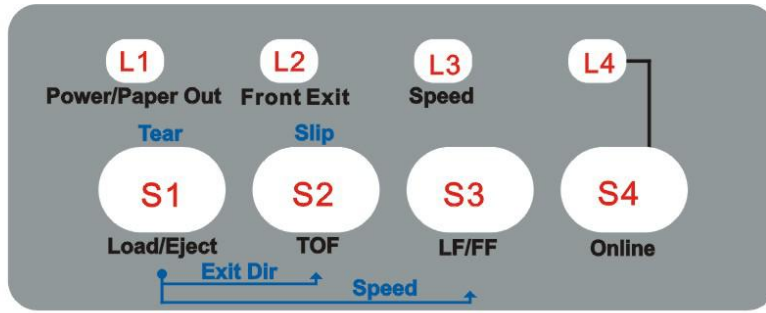
Function Name	Key	LED	Function Description
Load/Eject	{S1}	-	<ul style="list-style-type: none"> ● Load: Automatically loads the paper from the active source when no paper is on the Platen. ● Eject: Clears the paper completely out of the platen. In tractor mode, the continuous form still remains in the tractors.
Clear Buffer	[S4] + {S2} + {S3}	-	<p>Unprocessed data remaining in the printer buffer may corrupt the subsequent print result. The procedures to clear the printer buffer:</p> <ul style="list-style-type: none"> ● Clear all print jobs to the printer from the host computer. ● Press the 【Online】 key to set the printer offline. The printing stops but unprocessed data still remain in the print buffer. ● Simultaneously press the 【LF】 and 【TOF】 keys while keep holding the 【Online】 key. A second later, the printer beeps once to indicate clearing the print buffer. ● If hold the process for a few more seconds, the printer beeps 3 times to indicate the printer is initialized to its power up settings.
Initialize Printer	[S4] + {S2} + {S3} for longer time	-	

Function Name	Key	LED	Function Description
Override Multi Paper	[S1] → {S3} Hold [S1] for 2 sec.	Power (L1) Speed (L3)	This function overrides the Multi Paper setting in Section 5.3. The setting procedures: <ul style="list-style-type: none"> ● Hold the 【Load/Eject】 key for 2 seconds while the printer is offline and paper is loaded. The 【Power/Paper Out】 LED starts blinking. ● Every press on the 【LF】 key rotates the Multi paper settings between Disable (L3 = off), Standard (L3 = on), and Enhance (L3 = blinking). ● Finally, press the 【Load/Eject】 key to save the setting and terminate the procedures with the paper ejected. The 【Power】 LED starts flashing.
Activate Slip Profile	[S1] → {S4} Hold [S1] for 2 sec.	Power Online	This function conveniently recalls the top and left margins profile to facilitate slip/voucher printing. (Read Section 4.7 for details.) The procedures to activate and deactivate Slip profile: <ul style="list-style-type: none"> ● Hold the 【Load/Eject】 key for 2 seconds while the printer is offline and paper is loaded. The 【Power】 LED blinks. ● Alternative presses on the 【Online】 key activate and deactivate the Slip profile. Accordingly, the 【Online】 LED blinks and lights up to indicate the activation and deactivation, respectively. ● Finally, press the 【Load/Eject】 key to save the setting and terminate the procedures with the paper ejected. The 【Power】 LED stops blinking.
Micro-adjust TOF	[S4] → {S1} Hold [S4] for 3 sec.	Online	<ul style="list-style-type: none"> ● Hold the 【Online】 key for 3 seconds while the printer is offline and paper is loaded. The 【Online】 LED starts blinking. ● Press the 【TOF】 or 【LF】 keys to adjust the TOF position precisely. ● Finally, press the 【Online】 key to save the setting and terminate the procedures. The 【Online】 LED stop blinking.

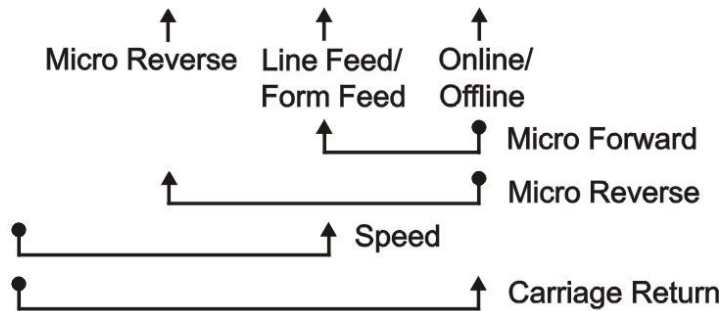


NOTE: Section 4.5 lists out additional operations while the printer is offline

4.5 Common Settings



Online/Offline State



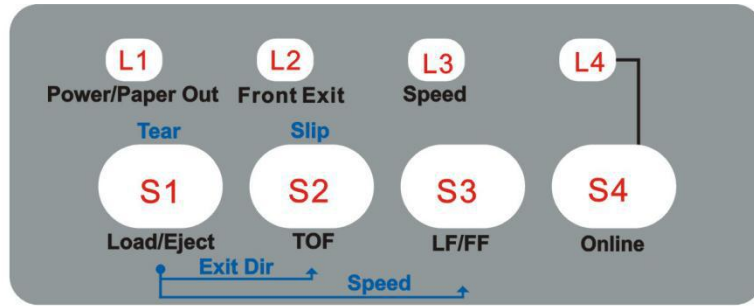
Remark : ● Hold ↑ Press

This table lists out the panel operations valid in both the **Online** and **Offline** states.

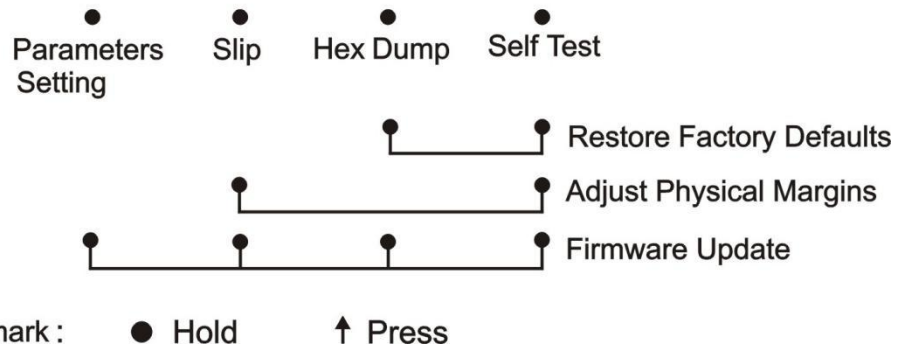
Function Name	Key	LED	Function Description
Micro Reverse	{S2}/[S2]	-	In combination with the LF key, this function can fine-tune the top margin on the current page without affecting the TOF position on subsequent pages.
	[S4] + {S2}	-	<ul style="list-style-type: none"> ● Press the TOF key while holding down the Online key. The printer feeds the paper in the reverse direction with tiny steps to allow fine tuning of the top margin. Release the key(s) to terminate the adjustment. NOTE: For fanfold, avoid reversing the paper over the previous page. Over-reversing may cause paper jam.
Micro Forward	[S4] + {S3}	-	While holding down the Online key, press the LF key to micro feed paper in the forward direction.
Line Feed	{S3}	-	Feeds a line with every press on the LF key.

Function Name	Key	LED	Function Description
Form Feed	[S3]	-	In tractor mode, holding this key will initially feeds a few lines; then afterward feeds the paper to the next TOF. If the paper is initially at the tear-off position, holding this key causes the current page returning to its TOF position. For cut sheet, Form Feed function is invalid. In cut sheet mode, holding this key will keep line feed until paper out.
Print Speed	[S1] + {S3}	Speed	Pressing the 【LF】 key while holding the 【Load/Eject】 key changes the print speed between LQ (L3 LED off), NLQ (L3 LED on), and Draft (L3 LED flashing).
Carriage Return	[S1] + {S4}	-	Pressing the 【Online】 key while holding the 【Load/Eject】 key initializes the carriage to recover from carriage fault (Error Alarm) caused by the code stripe. The printer then resumes the printing at the code strip position. This function cannot recover the carriage faults caused by ribbon jam or other reasons.
Online	{S4}	Online	Toggles between online and offline states.

4.6 Power-On State



Power-on State



While powering up the printer, hold the key(s) listed in the below chart.


Function Name	Key	LED	Function Description
Parameters setting	[S1]	-	Users can customize specific setting(s) to meet application requirements. New settings are effective permanently until the next change or Restore Factory Defaults. See Chapter 5 for details.
Slip	[S2]	-	Configures the Slip layout profile such as top and left margins. Refer Section 4.7 for details.
Hex Dump	[S3]	Speed	The printer beeps once and the Speed LED blinks to indicate Hex Dump mode, in which the printer prints data from the host line by line in hexadecimal representation then 16 ASCII codes leading by a line number. When the printer printing data, press Online key to pause printing. Turn the power off and the printer exits the Hex Dump mode.
Self Test / Status Page	[S4]	-	Prints the version numbers, settings and self-test pattern. Recommend to load 10-inch fanfold before the operation.

Function Name	Key	LED	Function Description
Restore Factory Defaults	[S4] + [S3]	-	Restore all settings to factory defaults. The carriage initializes and the printer beeps once after restoration.
Customize Page Layout	[S4] + [S2]		To customize the margins and tear-off position, please refer Chapter 6 for details.
Firmware Update	[S1] + [S2] + [S3] + [S4]	All	<p>Alternate blinking of Speed and Online LED indicates ready for firmware update from host.</p> <ul style="list-style-type: none"> Update process: Execute the Configuration Tool on your PC. Then upload the update firmware to the printer. During the update process by both methods, Speed and Online LEDs blink alternatively while Power and Front Exit LEDs are constantly on. Completion: At completion, the carriage initializes and the Power LED blinks with the Front Exit LED constantly on. <p>It takes ~20 seconds to complete the whole process. The printer resets after completion. If an error occurs repeat the process.</p> <p>NOTE: Ensure not to turn off the power or unplug the interface cable during the whole process. Only trained operators should do this update; otherwise, incorrect operation may easily damage the printer.</p>

4.7 Slip --- Printing on and Settings for Customized Form

Printing on a slip/voucher usually requires unique top and/or left margins, namely the “slip-profile”. The Control Panel operation supports convenient storing and recalling the slip-profile, as well as activating and deactivating it.

4.7.1 Slip Setup

 **This printer uses question and answer sessions to setup parameters here and in Chapter 5. The printer prompts a message or a parameter name. Then follows a line of assignments of keys for which the user replies to the prompted message or changes the value of the parameter.**

To configure the top and left margins for slip (slip-profile), please do the followings:

1. Power up printer while pressing the **TOF** key until the Print Head starts moving, then let go.

2. Load Paper. The printer prints the few lines below:

Paper Slip Mode

Keys act as proxies for designated functions in the setting dialog.

[LF]=Next, [TOP]=Back, [LOAD/EJECT]=OK, [ONLINE]=Exit, [ONLINE]+[LOAD/EJECT]=
Save and restart the printer.

Single Top Margin

Press the **Next** or **Back** keys to scroll to the parameter you want to change. The changeable parameters in the Slip-profiles are: Single Top Margin, Single Left Margin, Fanfold Top Margin, and Fanfold Left Margin in this order if **Next** is pressed. Pressing **Back** lists the parameter names in the reverse order.

1) Setting Single Top Margin:

- When Single Top Margin is prompted, press **OK** to go into this designated setting and the printer prompts:

[Single Top Margin]
[TOP]=-1, [LF]=+1, [LOAD/EJECT]=OK, [ONLINE]=Back, [ONLINE]+[LOAD/EJECT]=Save
and restart the printer. (Unit: mm)
4

- “4” in the last line shows the current top margin = 4mm. Enter the new value by pressing **-1** or **+1**. The allowed range for top margin is -25 ~ 128 mm.
- Press **OK** to let the printer prompt the revised value. Press **Save and restart** if you do not intend to change other slip-profile parameters. Otherwise, press **OK** again to confirm the change and the printer prints an “*” following the revised value. Then the printer prompts a message to ask to save the revised value:

Save the parameter settings ([LOAD/EJECT] or [ONLINE] = OK, [LF] = Next)?
Yes

- Press **OK** to confirm saving and the printer prompts an “*” following the “Yes” to respond to your confirmation. Otherwise, press **Next** to give up the change; the printer prompts a “No” and expects you to press **OK** to confirm not to save.

2) Setting Single Left Margin:

- In the Step 2 prompt, press **Next** to skip to the **Single Left Margin** setting indicated by this prompt:

Single Left Margin

- Follow the same procedures in 2-1) to revise the left margin. The allowed range of left margin is -77 ~ 77 mm.

3) Apply similar procedures to configure the top and left margins parameters for fanfold.

4.7.2 Activation and Deactivation of Slip-profile

1. Activate the Slip-profile:

- 1) Hold the **【Load/Eject】** key for 2 seconds while the printer is offline and paper is loaded. When the **【Load/Eject】** key is released, the printer beeps once and the **【Power】** LED blinks.
- 2) Next press the **【Online】** key (the **【Online】** LED blinks) to recall the profile of top and left margins for subsequent print jobs. Finally press the **【Load/Eject】** key and the printer beeps once to activate the Slip-profile

2. Deactivate the Slip-profile:

- 1) Hold the **【Load/Eject】** key for 2 seconds while the printer is offline and paper is loaded. When the **【Load/Eject】** key is released, the printer beeps once and the **【Power】** LED blinks.
- 2) Next press the **【Online】** key (the **【Online】** LED is on) to deactivate the profile of top and left margins for subsequent print jobs. Finally press the **【Load/Eject】** key and the printer beeps once.

5 Printer Setting Changes

i New settings in this chapter are permanently effective until the next change.

In order to meet specific print requirements, the printer configurations may be changed as follows: Hold down the **【Tear off】** key while powering on the printer and then release the key when the Print Head starts to move. After loading paper, the printer prompts the Printer Settings menu:

Printer Settings

Keys act as proxies for designated functions in the setting dialog.

[LF]=Next, [TOP]=Back, [LOAD/EJECT]=OK, [ONLINE]=Exit, [ONLINE]+[LOAD/EJECT]=
Save and restart the printer.

System Setup

Follow the printed dialog to input corresponding keys to skip a sub-menu, to change parameter values, or to save the changes. (*Also see section 4.7.1.*)

The Printer Settings menu contains 8 sub-menus appearing in the following order when **Next** skips a sub-menu (refer to [LF] assignment in the above prompt):

- System Setup
- Paper Setup
- Interface Setup
- Character Setup
- Other Setup
- Bi-directional Alignment
- Black Mark Mode
- Restore Factory Defaults

When you reach the desired sub-menu containing the parameter(s) to be changed, press **OK** to go into the sub-menu to make change(s). The remaining procedures are similar to the ones described in section 4.7.1.

5.1 System Setup



NOTE: The fat printed words are default.

System setup	Valid Settings	Function
Language	English ,Deutsch,Россия,Italiano,Français,Español,Türkçe,Portuguese.	Allows user to select one of the following languages: English, German, Russian, Italian, French, Spanish and Turkish, Portuguese.
Emulation	ESC/P2 , IBM	Selects the printer emulation. This should be the same as the host printer driver.
Auto CR (ESC/P2)	No, Yes	Yes: LF = LF+CR; No: LF = LF (Applies to ESC/P2 emulation only)
Auto CR(IBM)	No, Yes	Yes: LF = LF+CR; No: LF = LF (Applies to IBM emulation only)
Auto LF	No , Yes	Yes: CR = CR+LF; No: CR = CR
Print Dir	Bi-Dir , Uni-Dir	Bi-Dir: Graphics and text are printed in both directions, resulting in faster printing speed. Uni-Dir: Graphics and text are printed from left to right, resulting in higher precision.
Form Line	Disable, Enabled ,Dashed, NoPrint	Disable: Grids in block graphics are disjoint, but grids by graphics commands or slanted grids (block graphics) are not affected. Enabled: Vertical grids are continuous in all line spacing. Dashed: Horizontal grids are printed in dotted lines and vertical grids are not affected. NoPrint: Grids are not printed. But nested grids (by graphical commands) above 2 levels deep are printed.
Zero	0 , Ø	0: No-slashed Zero 0. Ø: Slashed Zero Ø.
Text Quality Mode	LQ , NLQ, Draft	Selects different text print quality.
Change Pin#1:	No , 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24	Defines the first broken / worn out pin. This pin will be substituted by an adjacent pin in the second pass printing. No: No substitution.

System setup	Valid Settings	Function
Change Pin #2	No , 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24	Defines the first broken / worn out pin. This pin will be substituted by an adjacent pin in the second pass printing. No: Not to substitution of the worn out pin.
Paper Slip Mode	No , Yes	See section 4.7 Slip. Yes: The printer takes the top and left margin settings according to the Slip Profile. No: The printer takes standard top and left margins settings.
Power-Saving	OFF, 1min, 2min, 5min , 10min	Defines the idle period before the printer gets into Save-energy Mode. OFF: The printer never goes into Save-energy Mode.
Multipaper	Disable, Standard , Enhance	Disable: The printer ignores the determination of paper thickness sensor; it keeps the impact force and the print speed unchanged. Standard: The printer increases the impact force and reduces the print speed. Enhance: The printer prints with even stronger impact force and slower print speed.
Impact	Normal , Heavy	Normal: The print speed is faster causing head hot easily and the impact force is weaker. Heavy: The print speed is reduced, resulting better thermal performance and copy capability.
Graphic Speed	Normal , Fast, Ultra	Selects different graphic print speed.

5.2 Paper Setup

Paper Setup	Valid Settings	Function
Single FormLen	2.5, 11/4, 3, 3.5, 11/3, 4, 5, 5.5, 6, 7, 8, 9, 10, 11 , 12, 14, A4, B4, Define	Sets the page length for single paper
Single Top	0, 1/6, 1/4, 1/3 , 1/2, 2/3, 3/4, 1, Define	Defines the separation in inches from the top edge of a single paper to the first print line.
Single Bottom	0 , 1/6, 1/4, 1/3, 1/2, 2/3, 3/4, 1, Define	Defines the separation in inches from the bottom edge of a single paper to the last print line.
Single Left Mrg (1.00mm)	-7, -6, -5, -4, -3, -2, -1, 0 , 1, 2, 3, 4, 5, 6, 7, Define	Compensation value added to Single Left Mrg.
Single Top Mrg (0.01")	-7, -6, -5, -4, -3, -2, -1, 0 , 1, 2, 3, 4, 5, 6, 7	Compensation value added to Single Top.
Single Auto Load	Disable, 0.5sec , 1sec, 1.5sec, 2sec	Defines the settling time before a single sheet is loaded. Disable: Press the 【Load/Eject】 key manually to load a single sheet.
Fanfold FormLen	2.5, 11/4, 3, 3.5, 11/3, 4, 5, 5.5, 6, 7, 8, 9, 10, 11 , 12, 14, A4, B4, Define	Sets the Page Length for fanfold.
Fanfold Top	0, 1/6, 1/4, 1/3 , 1/2, 2/3, 3/4, 1, Define	Defines the separation in inches from the top edge of a fanfold to the first print line.
Fanfold Bottom	0 , 1/6, 1/4, 1/3, 1/2, 2/3, 3/4, 1, Define	Define the separation in inches from the bottom edge of a fanfold to the last print line.
Fanfold Left Mrg (1.00mm)	-7, -6, -5, -4, -3, -2, -1, 0 , 1, 2, 3, 4, 5, 6, 7, Define	Compensation value added to Fanfold Left Mrg.
Fanfold Top Mrg (0.01")	-7, -6, -5, -4, -3, -2, -1, 0 , 1, 2, 3, 4, 5, 6, 7	Compensation value added to Fanfold Top.
Fanfold Auto Load	No, Yes	Yes: The printer loads paper to the first printing position automatically when using fanfold. No: Press the 【Load/Eject】 key to load paper when using fanfold.
Skip	No , Yes	Skips printing on perforation area. Only valid to fanfold. Yes: Blank lines between 2 pages. No: No blank lines between 2 pages.

Paper Setup	Valid Settings	Function
Tear	Auto , Manual, View, Auto@FF	<p>Auto: Form Feed command from the host causes the printer to advance the paper to the tear-off position. Printing resumes on the TOF on next page.</p> <p>Manual: After the completion of a print job, press a panel key to advance the paper to the tear-off position.</p> <p>View: No incoming print data in 1~2 seconds after printing completed causes the printer to advance the paper by 2 lines. Printing resumes 2 lines below the torn edge.</p> <p>Auto@FF: In this setting, a formfeed command is necessary to auto feed the form to tear position.</p>
Paper End Detect	No, Yes	<p>Yes: The printer stops printing if out of paper.</p> <p>No: The printer continues printing even out of paper.</p>
Compress	1330: Disable , 11:8.2, 13.6:8.2, Auto 1430+: Disable , 11:8.2, 13.6:8.2, 13.6:11, Auto	<p>Disable: No compression on the print line exceeding the printable width.</p> <p>Auto: The print squeezes an over-width print line (not exceeding 22" in contents) to the printable width.</p> <p>Other Compression Ratio: For example, a ratio of 11: 8.2 commands the printer to take this line compression ratio.</p> <p>**Remark: The compression is disabled after printer reset or loading a new page.</p>
Paper check	Invalid, Anti-jam, Anti-skew , Valid	<p>Place the carriage at proper positions to reduce the chance of paper jam and skew (effective for cut sheets and continuous paper).</p> <p>Invalid: "Anti-skew" and " Anti-jam" are both invalid.</p> <p>Anti-jam: After paper is inserted, carriage moves horizontally from end to end. This ensures that minor folds on the paper are ironed out to prevent possible jams.</p> <p>Anti-skew: After paper is inserted, during the first few lines of printing, the carriage moves to the center to apply pressure on the paper to reduce the chance of paper skew.</p> <p>Valid: "Anti-skew" and " Anti-jam" are both valid.</p>

Paper Setup	Valid Settings	Function
Exit Direction	Rear, Front	Selects eject direction for Manual cut sheet paper.
Buzzer	No, Yes	No: Buzzer does not sound if out of paper. Yes: Buzzer sounds if out of paper.
Tear Position	Invalid, Detect, Record	<p>This printer saves the tear-off position before switched off. After switched on, the printer if any change in the tear-off position and determines the start printing position.</p> <p>Invalid: Printing starts from previously switched off position.</p> <p>Detect: If the tear-off position is unchanged or smaller, printing starts from TOF position. If larger, printing starts from previously switched off position.</p> <p>Record: If the tear-off position is unchanged, printing starts from TOF position. If changed, printing starts from previously switched off position.</p>
APW (Auto Paper Width detection)	No , Yes	<p>Yes: Measures the width of the paper automatically after loading the paper.</p> <p>No: Disables page width measurement.</p> <p>NOTE:</p> <p>The printer is equipped with a page width sensor called "APW".</p> <p>If the sensor is defective, the "APW" setting will not appear in the menu; The 【Power】 LED blinks, 【Font 1】 and 【Font 2】 have no change, 【Online】 LED is off.</p>

Paper Setup	Valid Settings	Function
BlackMark	No, Yes	<p>No: Disables black mark sensor. Yes: Enables black mark sensor.</p> <p>When "Yes" and online, pressing the 【Tear Off】 key advances the paper to the tear-off position.</p> <p>BlackMark commands: (also see section 5.6)</p> <ul style="list-style-type: none"> • 1D 0C: Feeds paper to the print position designated by the black mark. Advance the paper to the tear-off position after printing. • 1C 28 4C 03 00 42 m: m = 0: feeds paper to the print position designated by the black mark. m = 1: feeds paper to the black mark tear-off position.
Width	1330: 8.0inch, 8.2inch , PaperWidth 1430+: 8.0inch, 8.2inch , 11.0inch PaperWidth	8.0inch: The maximum print width is 80 columns of 10cpi PICA characters. 8.2inch: The maximum print width is 82 columns of 10cpi PICA characters. 11.0inch: The maximum print width is 110 columns of 10cpi PICA characters. Paper Width: Sets the detected page width as print width. Enabling APW is required.
FormLen MicroAdj	-20 -19 -18 -17 -16 -15 -14 -13 -12 -11 -10 -9 -8 -7 -6 -5 -4 -3 -2 -1 0 +1 +2 +3 +4 +5 +6 +7 +8 +9 +10 +11 +12 +13 +14 +15 +16 +17 +18 +19 +20	Fine tunes the form-length by n/360" (0.07mm) based on the default value. (Valid for single papers and fanfolds.)

5.3 Interface Setup

Interface setup	Valid Settings	Function
PnP	No, Yes	No: Disables plug and play for USB Yes: Enables plug and play.
USB ID	No , Yes	No: Disables USB ID. Yes: Enables USB ID

5.4 Character Setup

Character setup	Valid Settings	Function
Character Table	Italic, Graphic	Italic: Selects standard character sets. Graphics: Selects IBM character sets. Please refer to section 12.1.
Character Group	Group 1, Group 2	The interpretation of ASCII codes between 0x80~0x9F: Group 1: as control codes. Group 1: as printable characters.
Int'l Char Set	USA , France, Germany, UK, DenmarkI, Sweden, Italy, SpainI, Japan, Norway, DenmarkII, Spain II, LatinAm, Denmark, China	International character set selections
Font	Roman , SansSerif, Courier, Prestige, Script, OCR B, OCR A, Orator, Gothic, Souvenir	Selects the font.
Pitch (dpi)	10 , 12, 15, 16.6, 17.1, 20, 24, PROPORTIONAL	Controls the characters per inch setting.
Code Page	CP437 , CP737, CP850, CP851, CP852, CP857, CP858, CP860, CP861, CP863, CP864, Extend864, CP865, CP866, Bulgaria866, CP1250, CP1251, CP1252, CP1253, CP1254, 8859_1, 8859_1SAP, 8859_2, 8859_5, 8859_7, 8859_9, 8859_15, BRASCII, Abicomp, Roman8, CoaxTwinax, New437, NewDig850, OldCode860, Flarro863, Hebrew865, CP1257, Ukraine866, Kazakhst866, Kamenicky, Mazovia, Baltic775, CROASCII, Farsi, Urdu, GreekDEC, ELOT928, UK_ASCII, US_ASCII, Swedish, German, Portuguese, French, Italian, Norwegian, Spanish, SiemensTurk, DECTurkish	Code page selections
15dpi Style	Small , Normal	Sets the height for 15CPI character. Small: prints in 1/8" height Normal: prints in full height
AGM(IBM)	No , Yes	Activates or deactivates the AGM (Alternative Graphics Mode) mode in IBM emulation

5.5 Other Setup

Other Setup	Valid Settings	Function
Form Length Ctrl	No, Yes	No: Software command cannot override the, FormLen in Page Setup . Yes: Software command overrides the FormLen in Page Setup .
Print Speed Ctrl	No, Yes	No: Software command cannot override the FormLen in Page Setup . Yes: Software command overrides the FormLen in Page Setup .
Pitch Ctrl	No, Yes	No: Pitch commands are invalid in neither of the emulation. Yes: Pitch commands are valid either of the emulations.
Font Ctrl	No, Yes	No: Font commands are invalid in neither of the emulation. Yes: Font commands are valid either of the emulations.
Uni-Dir Ctrl	No , Yes	No: Uni-Direction print commands are invalid in neither of the emulation. Yes: Uni-Direction print commands are valid in either of the emulations.

5.5.1 German (Deutsch)

System Setup	Gültige Werte
Language	English , Deutsch, Россия, Italiano, Français, Español, Türkçe, Portugiesisch.
Emulation	ESC/P2 , IBM
Auto CR(ESC/P2)	Ja , Nein
Auto CR(IBM)	Ja , Nein
Auto LF	Ja, Nein
Druck Dir	Bi-Dir , Uni-Dir
Tabellenlinien	Unterbrochen, Verbunden , Gepunktet, Nicht gedruckt
Durchgestrichene	0 , Ø
Druckgeschwindigkeit	Normal , Schnell, Ultra
Text Qualität	LQ , NLQ, Entwurf
Ersetze die erste gebrochene Nadel	Aus , 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24
Ersetze die zweite gebrochene Nadel	Aus , 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24
Belegmodus	Ja, Nein
Energiesparmodus	Aus, 1min, 2min, 5min , 10min
Mehrlagiges Drucken	Ungültig , Normaldurchschlag, Verstärkter Durchschlag,
Impact	Normal , Stark
Grafik Geschwindigkeit	Normal , Schnell, Ultra

Papier Setup	Gültige Werte
Einzel Formularlänge	2.5, 11/4, 3, 3.5, 11/3, 4, 5, 5.5, 6, 7, 8, 9, 10, 11 , 12, 14, A4, B4, Define
Einzel Oberer Rand	0, 1/6 , 1/4, 1/3, 1/2, 2/3, 3/4, 1, Define
Einzel Unterer Rand	0 , 1/6, 1/4, 1/3, 1/2, 2/3, 3/4, 1, Define
Einzelblatt Linker Rand MikroEinstellung	-7, -6, -5, -4, -3, -2, -1, 0 , 1, 2, 3, 4, 5, 6, 7, Define
Einzelblatt Oberer Rand MikroEinstellung	-7, -6, -5, -4, -3, -2, -1, 0 , 1, 2, 3, 4, 5, 6, 7
Einzelblatt Automatisch Papier laden	Disable, 0.5sec , 1sec, 1.5sec, 2sec
Endlos Formularlänge	2.5, 11/4, 3, 3.5, 11/3, 4, 5, 5.5, 6, 7, 8, 9, 10, 11 , 12, 14, A4, B4, Define
Endlos Oberer Rand	0, 1/6 , 1/4, 1/3, 1/2, 2/3, 3/4, 1, Define
Endlos Unterer Rand	0 , 1/6, 1/4, 1/3, 1/2, 2/3, 3/4, 1, Define

Papier Setup	Gültige Werte
Endlospapier Linker Rand MikroEinstellung	-7, -6, -5, -4, -3, -2, -1, 0 , 1, 2, 3, 4, 5, 6, 7, Define
Endlospapier Oberer Rand MikroEinstellung	-7, -6, -5, -4, -3, -2, -1, 0 , 1, 2, 3, 4, 5, 6, 7
Endlospapier Automatisch Papier laden	Ja , Nein
Perforationssprung	Ja, Nein
Abreißen	Automatisches , Manuelles, Kurzes
Papierendeerkennung	Ja , Nein
Stauchung breiter Formate	1330: Disable , 11:8.2, 13.6:8.2, Auto 1430+: Disable , 11:8.2, 13.6:8.2, 13.6:11, Auto
Papierhandhabung	Anti-Schräglauf , Ein, Aus, Anti-Papierstau
Papiereinzugsrichtung	Von hinten, Von vorne
Piepton bei Papierende	Ja , Nein
Speichern der Tearposition	Nein, Erkennen, Speichern
Papierbreiterkennung	Ja, Nein
Papierschräglauferkennung	Nein , Normal, Genau
BlackMark Modus	Ja, Nein
Druckbreite	1330: 8.0inch, 8.2inch , PaperWidth 1430+: 8.0inch, 8.2inch, 11.0inch , PaperWidth
Formularlänge MikroEinstellung	-20 -19 -18 -17 -16 -15 -14 -13 -12 -11 -10 -9 -8 -7 -6 -5 -4 -3 -2 -1 0 +1 +2 +3 +4 +5 +6 +7 +8 +9 +10 +11 +12 +13 +14 +15 +16 +17 +18 +19 +20

Schnittstellen Setup	Gültige Werte
PnP Funktion	Ja , Nein
USB ID	Ja, Nein

Zeichen Setup	Gültige Werte
Zeichensatz	Standard, IBM
PC-Zeichensatz	Gruppe I, Gruppe II
Land	USA , Frankreich, Deutschland, UK, Dänemark, Schweden, Italien, Spanien, Japan, Norwegen, Dänemark II, Spanien II, Latein-Amerika, Dänemark/Norwegen, China
Font	Roman , SansSerif, Courier, Prestige, Script, OCR B, OCR A, Orator, Gothic, Souvenir
Pitch(cpi)	10 , 12, 15, 16.6, 17.1, 20, 24, PROPORTIONAL
Code Page	CP437 , CP737, CP850, CP851, CP852, CP857, CP858, CP860, CP861, CP863, CP864, Extend864, CP865, CP866, Bulgaria866, CP1250, CP1251, CP1252, CP1253, CP1254, 8859_1, 8859_1SAP, 8859_2, 8859_5, 8859_7, 8859_9, 8859_15, BRASCII, Abicomp, Roman8, CoaxTwinax, New437, NewDig850, OldCode860, Flarro863, Hebrew865, CP1257, Ukraine866, Kazakhst866, Kamenicky, Mazovia, Baltic775, CROASCII, Farsi, Urdu, GreekDEC, ELOT928, UK_ASCII, US_ASCII, Swedish, German, Portuguese, French, Italian, Norwegian, Spanish, SiemensTurk, DECTurkish
15cpi Style	Schmal , Normal
AGM(IBM)	Ja, Nein

Erweitertes Setup	Gültige Werte
Kommando für Formularlänge	Ja , Nein
Kommando für Druckgeschwindigkeit	Ja , Nein
Pitch Ctrl	Ja , Nein
Font Ctrl	Ja , Nein
Kommando für uni-direktionalen Druck	Ja, Nein

5.5.2 Russian (Россия)

обновление системы	Правильные значения
Language	English , Deutsch, Россия, Italiano, Français, Español, Türkçe, Португальский.
Эмуляция	ESC/P2 , IBM
Авто CR(ESC/P2)	Да , Нет
Авто CR(IBM)	Да , Нет
Авто LF	Да, Нет
Однонаправленная	Bi-Dir , Uni-Dir
Контурная линия	отключен, Подключен , точечная линия, отсутствие печати
Slashed Zero Ø	0 , Ø
Скорость печати	Normal , Fast, Ultra
Качество текста	LQ , NLQ, проект
Замена первой сломанной иглы	№ , 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24
Замена второй сломанной иглы	№ , 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24
Профильный режим Slip	Да, Нет
Экономный режим	OFF, 1min, 2min, 5min , 10min
Многослойная печать	недействительно , Обычная копия, усиленная копия,
Ударный режим печати	Normal , Heavy
Скорость графики	Normal , Fast, Ultra

Настройка бумаги	Правильные значения
Длина формы для отдельных листов	2.5, 11/4, 3, 3.5, 11/3, 4, 5, 5.5, 6, 7, 8, 9, 10, 11 , 12, 14, A4, B4, Define
Отступ сверху для отдельных листов	0, 1/6 , 1/4, 1/3, 1/2, 2/3, 3/4, 1, Define
Отступ снизу для отдельных листов	0 , 1/6, 1/4, 1/3, 1/2, 2/3, 3/4, 1, Define
Микронастройка левого поля бумаги в виде отдельных листов	-7, -6, -5, -4, -3, -2, -1, 0 , 1, 2, 3, 4, 5, 6, 7, Define
Микронастройка верхнего поля бумаги в виде отдельных листов	-7, -6, -5, -4, -3, -2, -1, 0 , 1, 2, 3, 4, 5, 6, 7
Автоматическая загрузка бумаги в виде отдельных листов	Disable, 0.5sec , 1sec, 1.5sec, 2sec

Настройка бумаги	Правильные значения
Длина формы для непрерывной бумаги	2.5, 11/4, 3, 3.5, 11/3, 4, 5, 5.5, 6, 7, 8, 9, 10, 11 , 12, 14, A4, B4, Define
Отступ сверху для непрерывной бумаги	0, 1/6 , 1/4, 1/3, 1/2, 2/3, 3/4, 1, Define
Отступ снизу для непрерывной бумаги	0 , 1/6, 1/4, 1/3, 1/2, 2/3, 3/4, 1, Define
Микронастройка левого поля фальцованной форматированной бумаги	-7, -6, -5, -4, -3, -2, -1, 0 , 1, 2, 3, 4, 5, 6, 7, Define
Микронастройка верхнего поля фальцованной форматированной бумаги	-7, -6, -5, -4, -3, -2, -1, 0 , 1, 2, 3, 4, 5, 6, 7
Fanfold Form Automatic Paper Loading	Да , Нет
Пропуск перфорации	Да, Нет
Отрыв бумаги	Автоматический отрыв бумаги , ручной отрыв бумаги, короткий отрыв бумаги
Определение конца бумаги	Да , Нет
Сжатие широкой форматной бумаги	1330: Disable , 11:8.2, 13.6:8.2, Auto 1430+: Disable , 11:8.2, 13.6:8.2, 13.6:11, Auto
Подготовка бумаги к печати	Защита от перекоса , действительно, недействительно, защита от заедания бумаги
Направление фрикционной подачи бумаги	Сзади, спереди
Звуковой сигнал при отсутствии бумаги	Да , Нет
Запись позиции отрыва	Недействительно, определение, запись
Определение ширины бумаги	Да, Нет
Определение наклона бумаги	Недействительный , обычный, точный
Режим черной метки	Да, Нет
Ширина печати	1330: 8.0inch, 8.2inch , PaperWidth 1430+: 8.0inch, 8.2inch, 11.0inch , PaperWidth
Микронастройка длины форматной бумаги	-20 -19 -18 -17 -16 -15 -14 -13 -12 -11 -10 -9 -8 -7 -6 -5 -4 -3 -2 -1 0 +1 +2 +3 +4 +5 +6 +7 +8 +9 +10 +11 +12 +13 +14 +15 +16 +17 +18 +19 +20
Функция PnP	Да , Нет
USB ID	Да, Нет

Настройка интерфейс	Правильные значения
Функция PnP	Да , Нет
USB ID	Да, Нет

Настройка символов	Правильные значения
Набор символов	Стандартный, IBM
Группа символов	Группа I, группа II
Набор знаков	USA , France, Germany, UK, Дания, Sweden, Italy, Spain, Japan, Норвегия, Дания II, Spain II, Латинская Америка, Дания/Норвегия, Китай
Font	Roman , SansSerif, Courier, Prestige, Script, OCR B, OCR A, Orator, Gothic, Souvenir
Pitch(cpi)	10 , 12, 15, 16.6, 17.1, 20, 24, PROPORTIONAL
Code Page	CP437 , CP737, CP850, CP851, CP852, CP857, CP858, CP860, CP861, CP863, CP864, Extend864, CP865, CP866, Bulgaria866, CP1250, CP1251, CP1252, CP1253, CP1254, 8859_1, 8859_1SAP, 8859_2, 8859_5, 8859_7, 8859_9, 8859_15, BRASCII, Abicomp, Roman8, CoaxTwinax, New437, NewDig850, OldCode860, Flarro863, Hebrew865, CP1257, Ukraine866, Kazakhst866, Kamenicky, Mazovia, Baltic775, CROASCII, Farsi, Urdu, GreekDEC, ELOT928, UK_ASCII, US_ASCII, Swedish, German, Portuguese, French, Italian, Norwegian, Spanish, SiemensTurk, DECTurkish
15cpi Style	Small , Normal
AGM(IBM)	Да, Нет

Другие настройки	Правильные значения
Команда длины форматной бумаги	Да , Нет
Команда скорости печати	Да , Нет
Pitch Ctrl	Да , Нет
Font Ctrl	Да , Нет
Команда однонаправленной печати	Да, Нет

5.5.3 Italian (Italiano)

Setup sistema	Impostazioni Valide
Language	English , Deutsch, Россия, Italiano, Français, Español, Türkçe, Portoghese.
Emulazione	ESC/P2 , IBM
Auto CR(ESC/P2)	Si , No
Auto CR(IBM)	Si , No
Auto LF	Si, No
Stampa Uni-Dir	Bi-Dir , Uni-Dir
Linee Formato	Disconnessa, Connessa , riga aghi, Non stampa
Zero barrato	0 , Ø
Velocità stampa	Normale , Veloce, Ultra
Qualità Testo	LQ , NLQ, bozza
Sostituire primo ago rotto	No , 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24
Sostituire secondo ago rotto	No , 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24
Impostazioni moduli piccoli	Si, No
Modo risparmio energia	OFF, 1min, 2min, 5min , 10min
Stampa multicopia	Non valido , Copia normale, maggior impatto
Modo impatto	Normale , Pesante
Velocità Grafica	Normale , Veloce, Ultra

Imposta carta	Impostazioni Valide
Lunghezza Foglio	2.5, 11/4, 3, 3.5, 11/3, 4, 5, 5.5, 6, 7, 8, 9, 10, 11 , 12, 14, A4, B4, Define
Margine Sup. Foglio	0, 1/6 , 1/4, 1/3, 1/2, 2/3, 3/4, 1, Define
Margine Infer. Foglio	0 , 1/6, 1/4, 1/3, 1/2, 2/3, 3/4, 1, Define
Microregolazione foglio sinistra	-7, -6, -5, -4, -3, -2, -1, 0 , 1, 2, 3, 4, 5, 6, 7, Define
Microregolazione in alto foglio	-7, -6, -5, -4, -3, -2, -1, 0 , 1, 2, 3, 4, 5, 6, 7
Carica automatica foglio singolo	Disable, 0.5sec , 1sec, 1.5sec, 2sec
Lungh. Mod. Continuo	2.5, 11/4, 3, 3.5, 11/3, 4, 5, 5.5, 6, 7, 8, 9, 10, 11 , 12, 14, A4, B4, Define
Margine Sup. Continuo	0, 1/6 , 1/4, 1/3, 1/2, 2/3, 3/4, 1, Define
Margine Inf. Continuo	0 , 1/6, 1/4, 1/3, 1/2, 2/3, 3/4, 1, Define
Microregolazione SX modulo continuo	-7, -6, -5, -4, -3, -2, -1, 0 , 1, 2, 3, 4, 5, 6, 7, Define

Imposta carta	Impostazioni Valide
Microregolazione in alto modulo continuo	-7, -6, -5, -4, -3, -2, -1, 0 , 1, 2, 3, 4, 5, 6, 7
Carica automatica modulo continuo	Si , No
Salto Perforazione	Si, No
Strappo	Auto Strappo , Strappo manuale, Strappo corto
Controllo fine carta	Si , No
Larghezza formato compressa	1330: Disable , 11:8.2, 13.6:8.2, Auto 1430+: Disable , 11:8.2, 13.6:8.2, 13.6:11,Auto
Gestione carta	Anti-scivolamento ,Valido,Invalido,Anti-inceppamento
Direzione frizione carta	Retro, Frontale
Avviso sonoro a fine carta	Si , No
Registra posizione strappo carta	Invalido, Rileva, Registra
Rilevamento larghezza carta	Si, No
Rilevamento scivolamento carta	Invalido , Normale, Preciso
Modalità segno di riferimento	Si, No
Larghezza stampa	1330: 8.0inch, 8.2inch , PaperWidth 1430+: 8.0inch, 8.2inch, 11.0inch , PaperWidth
Microregolazione lunghezza carta modulo continuo	-20 -19 -18 -17 -16 -15 -14 -13 -12 -11 -10 -9 -8 -7 -6 -5 -4 -3 -2 -1 0 +1 +2 +3 +4 +5 +6 +7 +8 +9 +10 +11 +12 +13 +14 +15 +16 +17 +18 +19 +20

Setup IF	Impostazioni Valide
Funzione PnP	Si , No
USB ID	Si, No

Imposta caratteri	Impostazioni Valide
Set caratteri	Standard, IBM
Gruppo Carattere	Group I, Group II
Set Carat. Int.	USA ,Francia, Germania, Regno Unito, Danimarca, Svezia, Italia, Spagna, Giappone, Norvegia, Danimarca II, Spagna II, America Latina, Danimarca/Norvegia, Porcellana
Font	Roman ,SansSerif, Courier, Prestige, Script, OCR B, OCR A, Orator, Gothic, Souvenir
Pitch(cpi)	10 , 12, 15, 16.6, 17.1, 20, 24, PROPORTIONAL
Code Page	CP437 , CP737, CP850, CP851, CP852, CP857, CP858, CP860, CP861, CP863, CP864, Extend864, CP865, CP866, Bulgaria866, CP1250, CP1251, CP1252, CP1253, CP1254, 8859_1, 8859_1SAP, 8859_2, 8859_5, 8859_7, 8859_9, 8859_15, BRASCII, Abicomp, Roman8, CoaxTwinax, New437, NewDig850, OldCode860, Flarro863, Hebrew865, CP1257, Ukraine866, Kazakhst866, Kamenicky, Mazovia, Baltic775, CROASCII, Farsi, Urdu, GreekDEC, ELOT928, UK_ASCII, US_ASCII, Swedish, German, Portuguese, French, Italian, Norwegian, Spanish, SiemensTurk, DECTurkish
15cpi Style	Small , Normal
AGM(IBM)	Si, No

Altri Setup	Impostazioni Valide
Comando lunghezza carta	Si , No
Comando velocità stampa	Si , No
Pitch Ctrl	Si , No
Font Ctrl	Si , No
Comando stampa monodirezionale	Si, No

5.5.4 French (Français)

Setup sistema	Impostazioni Valide
Language	English , Deutsch, Россия, Italiano, Français, Español, Türkçe, Portugese.
Emulazione	ESC/P2 , IBM
Auto CR(ESC/P2)	Si , No
Auto CR(IBM)	Si , No
Auto LF	Si, No
Stampa Uni-Dir	Bi-Dir , Uni-Dir
Linee Formato	Disconnessa, Connessa , riga aghi, Non stampa
Zero barrato	0 , Ø
Velocità stampa	Normale , Veloce, Ultra
Qualità Testo	LQ , NLQ, bozza
Sostituire primo ago rotto	No , 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24
Sostituire secondo ago rotto	No , 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24
Impostazioni moduli piccoli	Si, No
Modo risparmio energia	OFF, 1min, 2min, 5min , 10min
Stampa multicopia	Non valido , Copia normale, maggior impatto
Modo impatto	Normale , Pesante
Velocità Grafica	Normale , Veloce, Ultra

Réglage papier	Paramètres Valides
Feuille LongPage	2.5, 11/4, 3, 3.5, 11/3, 4, 5, 5.5, 6, 7, 8, 9, 10, 11 , 12, 14, A4, B4, Définie
Bord Sup. Feuille	0, 1/6, 1/4, 1/3 , 1/2, 2/3, 3/4, 1, Définie
Bord Inf. Feuille	0 , 1/6, 1/4, 1/3, 1/2, 2/3, 3/4, 1, Définie
Marge Gauche Feuille	-7, -6, -5, -4, -3, -2, -1, 0 , 1, 2, 3, 4, 5, 6, 7, c
Marge Haute Feuille	-7, -6, -5, -4, -3, -2, -1, 0 , 1, 2, 3, 4, 5, 6, 7
Charg. Auto Feuille	Non, 0.5sec , 1sec, 1.5sec, 2sec
Listing LongPage	2.5, 11/4, 3, 3.5, 11/3, 4, 5, 5.5, 6, 7, 8, 9, 10, 11 , 12, 14, A4, B4, Définie
Listing Bord Sup.	0, 1/6, 1/4, 1/3 , 1/2, 2/3, 3/4, 1, Définie
Listing Bord infér.	0 , 1/6, 1/4, 1/3, 1/2, 2/3, 3/4, 1, Définie
Listing Marge Gauche	-7, -6, -5, -4, -3, -2, -1, 0 , 1, 2, 3, 4, 5, 6, 7, Définie
Listing Marge Haute	-7, -6, -5, -4, -3, -2, -1, 0 , 1, 2, 3, 4, 5, 6, 7
Listing Charg. Auto	Non, Oui
Saut perforation	Non , Oui

Réglage papier	Paramètres Valides
Coupe	Auto , Manuelle, Courte, Auto@FF
Délect. Fin Papier	Non, Oui
Condense	1330: Non , 11:8.2, 13.6:8.2,Auto 1430+: Non , 11:8.2, 13.6:8.2,13.6:11,Auto
Gestion Papier	Non, Bourrage, Anti-biais , Oui,
Direction de sortie	Arrière, Avant
Alarma	Non, Oui
Position de Coupe	Non, Détecter, Enregistrer
APW	Non , Oui
Largeur Impression	1330: 8.0inch, 8.2inch ,PaperWidth 1430+: 8.0inch, 8.2inch, 11.0inch ,PaperWidth
LongPag Micro-ajust	-20 -19 -18 -17 -16 -15 -14 -13 -12 -11 -10 -9 -8 -7 -6 -5 -4 -3 -2 -1 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

Config Interface	Paramètres Valides
Fonction PnP	Oui , Non
USB ID	Oui, Non

Config. Caractère	Paramètres Valides
Jeu Caractères	Standard, IBM
Groupe Caractères	Groupe 1, Groupe 2
Pays	USA , France, Allemagne, Royaume-Uni, Denmark, Suède, Italie, Espagne, Japon, Norvège, Denmark II, Espagne II, Amerique latine, Denmark/Norvège, Chine
Font	Roman ,SansSerif, Courier, Prestige, Script, OCR B, OCR A, Orator, Gothic, Souvenir
Pitch(cpi)	10 , 12, 15, 16.6, 17.1, 20, 24, PS
Code Page	CP437 , CP737, CP850, CP851, CP852, CP857, CP858, CP860, CP861, CP863, CP864, Extend864, CP865, CP866, Bulgaria866, CP1250, CP1251, CP1252, CP1253, CP1254, 8859_1, 8859_1SAP, 8859_2, 8859_5, 8859_7, 8859_9, 8859_15, BRASCII, Abicomp, Roman8, CoaxTwinax, New437, NewDig850, OldCode860, Flarro863, Hebrew865, CP1257, Ukraine866, Kazakhst866, Kamenicky, Mazovia, Baltic775, CROASCII, Farsi, Urdu, GreekDEC, ELOT928, UK_ASCII, US_ASCII, Swedish, German, Portuguese, French, Italian, Norwegian, Spanish, SiemensTurk, DECTurkish
15cpi Style	Small , Normal
AGM(IBM)	Oui, Non

Autre réglage	Paramètres Valides
Commande Longueur de Page	Oui , Non
Commande Vitesse Impresssion	Oui , Non
Pitch Ctrl	Oui , Non
Font Ctrl	Oui , Non
Commande Impression Uni-Directionnelle	Oui, Non

5.5.5 Spanish (Español)

Config. Sistema	Ajustes validos
Language	English , Deutsch, Россия, Italiano, Français, Español, Türkçe, Portugués.
Emulación	ESC/P2, IBM
Auto CR(ESC/P2)	Si , No
Auto CR(IBM)	Si , No
Auto LF	Si, No
Uni-Dir	Bi-Dir , Uni-Dir
Linea del Formato	Desconectado, Conectado , Línea de Punto, Sin Impresión
Slashed Zero Ø	0 , Ø
Velocidad de Impresión	Normal , Fast, Ultra
Tipo de calidad de texto	LQ , NLQ, proyecto
Sustituir 1er pin roto	Non , 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24
Sustituir 2do pin roto	Non , 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24
Perfil Modo Slip	Si, No
Modo Ahorro de Energía	OFF, 1min, 2min, 5min , 10min
Impresión Multi-Copias	Inválido , Copia Normal, Copia Fuerte
Modo de Impacto	Normal , Fuerte
Selecciona diferentes qualidades de impressão	Normal , Fast, Ultra

Config. Papel	Ajustes validos
Tamaño Hojas Sueltas	2.5, 11/4, 3, 3.5, 11/3, 4, 5, 5.5, 6, 7, 8, 9, 10, 11 , 12, 14, A4, B4, Define
Margen Sup. Folios	0, 1/6 , 1/4, 1/3, 1/2, 2/3, 3/4, 1, Define
Margen Inf. Folios	0 , 1/6, 1/4, 1/3, 1/2, 2/3, 3/4, 1, Define
Micro Ajus. Marg. Izq. Hoja Suelta	-7, -6, -5, -4, -3, -2, -1, 0 , 1, 2, 3, 4, 5, 6, 7, Define
Micro Ajus. Marg. Der. Hoja Suelta	-7, -6, -5, -4, -3, -2, -1, 0 , 1, 2, 3, 4, 5, 6, 7
Carga de Papel Auto. Hoja Suelta	Disable, 0.5sec , 1sec, 1.5sec, 2sec
Tamaño Papel Continuo	2.5, 11/4, 3, 3.5, 11/3, 4, 5, 5.5, 6, 7, 8, 9, 10, 11 , 12, 14, A4, B4, Define
Margen Sup. Pap Cont.	0, 1/6 , 1/4, 1/3, 1/2, 2/3, 3/4, 1, Define
Margen Inf. Pap.Cont.	0 , 1/6, 1/4, 1/3, 1/2, 2/3, 3/4, 1, Define
Micro Ajus. Marg. Der. Pap. Cont.	-7, -6, -5, -4, -3, -2, -1, 0 , 1, 2, 3, 4, 5, 6, 7, Define
Micro Ajus. Marg. Der. Pap. Cont.	-7, -6, -5, -4, -3, -2, -1, 0 , 1, 2, 3, 4, 5, 6, 7
Carga de Papel Auto. Hoja Suelta	Si , No
Salto perforación	Si, No
Corte	Corte Auto , Corte Manual, Corte Corto
Detección Fin de Papel	Si , No
Compresión de Form. Ancho	1330: Disable , 11:8.2, 13.6:8.2, Auto 1430+: Disable , 11:8.2, 13.6:8.2,13.6:11,Auto
Manejo de Papel	Anti-desvío , Válido, Inválido, Anti-atasco
Dirección de Alim. De Papel por Fricción	Posterior, Frontal
Alarma si no hay papel	Si , No
Registro de Posición de Corte	Inválido, Detectar, Registrar
Detección Ancho de Papel	Si, No
Detección Desvío de Papel	Inválido , Normal, Preciso
Modo Marca Negra	Si, No
Ancho de Impresión	1330:8.0inch, 8.2inch , PaperWidth 1430+: 8.0inch, 8.2inch, 11.0inch ,PaperWidth
Micro-Ajus. Long. Hoja	-20 -19 -18 -17 -16 -15 -14 -13 -12 -11 -10 -9 -8 -7 -6 -5 -4 -3 -2 -1 0 +1 +2 +3 +4 +5 +6 +7 +8 +9 +10 +11 +12 +13 +14 +15 +16 +17 +18 +19 +20

Conf. Interface	Ajustes validos
Función PnP	Si , No
USB ID	Si, No

Config. Carácter	Ajustes validos
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Juego de Caracteres	Estándar, IBM
Grupo de Caracteres	Grupo I, Grupo II
Carácter Local	USA , Francia, Alemania, Reino Unido, Dinamarca, Suecia, Italia, España, Japón, Noruega, Dinamarca II, España II, AméricaLatina, Dinamarca, China
Font	Roman , SansSerif, Courier, Prestige, Script, OCR B, OCR A, Orator, Gothic, Souvenir
Pitch(cpi)	10 , 12, 15, 16.6, 17.1, 20, 24, PROPORTIONAL
Code Page	CP437 , CP737, CP850, CP851, CP852, CP857, CP858, CP860, CP861, CP863, CP864, Extend864, CP865, CP866, Bulgaria866, CP1250, CP1251, CP1252, CP1253, CP1254, 8859_1, 8859_1SAP, 8859_2, 8859_5, 8859_7, 8859_9, 8859_15, BRASCII, Abicomp, Roman8, CoaxTwinax, New437, NewDig850, OldCode860, Flarro863, Hebrew865, CP1257, Ukraine866, Kazakhst866, Kamenicky, Mazovia, Baltic775, CROASCII, Farsi, Urdu, GreekDEC, ELOT928, UK_ASCII, US_ASCII, Swedish, German, Portuguese, French, Italian, Norwegian, Spanish, SiemensTurk, DECTurkish
15cpi Style	Small, Normal
AGM(IBM)	Si, No

Config. Otros	Ajustes validos
Comando Longitud de Hoja	Si , No
Comando Velocidad de Impresión	Si , No
Pitch Ctrl	Si , No
Font Ctrl	Si , No
Comando Impresión Uni-direccional	Si, No

5.5.6 Turkish (Türkçe)

Sistem Ayarı	Geçerli ölçüler
Language	English ,Deutsch,Россия,Italiano,Français,Español,Türkçe,Portekizce.
Emülasyon	ESC/P2 , IBM
Otom. Satırbaşı(ESC/P2)	Evet , Hayır
Otom. Satırbaşı(IBM)	Evet , Hayır
Otom. Satır besleme	Evet, Hayır
Tek-Yön baskı	Bi-Dir , Uni-Dir
Kağıt satırı	Bağlı değil, Bağlandı , Nokta satırı, Baskı yok
Slashed Zero Ø	0 ,Ø
Metin kalitesi	LQ , NLQ, taslak
Yazıcı Hızı	Normal , Fast, Ultra
Arızalı ilk iğne yedeği	Hayır , 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24
Arızalı ikinci iğne yedeği	Hayır , 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24
Slip profile mode	Evet, Hayır
Enerji tasarrufu modu	OFF, 1min, 2min, 5min , 10min
Çok katmanlı baskı	Geçersiz , Normal kopya, Güçlendirilmiş kopya
Vuruş modu	Normal , Heavy
Farklı baskı özellikleri seçer	Normal , Fast, Ultra

Kağıt Ayarı	Geçerli ölçüler
Tek-kağıt Form uzunluğu	2.5, 11/4, 3, 3.5, 11/3, 4, 5, 5.5, 6, 7, 8, 9, 10, 11 , 12, 14, A4, B4, Define
Tek-kağıt Üst kenar boşluğu	0, 1/6 , 1/4, 1/3, 1/2, 2/3, 3/4, 1, Define
Tek-kağıt Alt kenar boşluğu	0 , 1/6, 1/4, 1/3, 1/2, 2/3, 3/4, 1, Define
Tek-kağıt Sol kenar boşluğu hassas ayar	-7, -6, -5, -4, -3, -2, -1, 0 , 1, 2, 3, 4, 5, 6, 7, Define
Tek-kağıt Üst kenar boşluğu hassas ayar	-7, -6, -5, -4, -3, -2, -1, 0 , 1, 2, 3, 4, 5, 6, 7
Tek-kağıt otomatik kağıt yükleme	Disable, 0.5sec , 1sec, 1.5sec, 2sec
Sürekli Form Kağıt Uzunluğu	2.5, 11/4, 3, 3.5, 11/3, 4, 5, 5.5, 6, 7, 8, 9, 10, 11 , 12, 14, A4, B4, Define
Sürekli Form Kağıt Üst kenar boşluğu	0, 1/6 , 1/4, 1/3, 1/2, 2/3, 3/4, 1, Define
Sürekli Form Kağıt Alt kenar boşluğu	0 , 1/6, 1/4, 1/3, 1/2, 2/3, 3/4, 1, Define

Kağıt Ayarı	Geçerli ölçüler
Sürekli Form Kağıt Sol kenar hassas ayar	-7, -6, -5, -4, -3, -2, -1, 0 , 1, 2, 3, 4, 5, 6, 7, Define
Sürekli Form Kağıt Üst kenar hassas ayar	-7, -6, -5, -4, -3, -2, -1, 0 , 1, 2, 3, 4, 5, 6, 7
Sürekli Form Otomatik Kağıt Yükleme	Evet , Hayır
Delik atlama	Evet, Hayır
Kağıt kesme	Otomatik kesim , Elle kesim, Kısa kesim
Sayfa sonu algılama	Evet , Hayır
Geniş Baskı sıkıştırma	1330: Disable , 11:8.2, 13.6:8.2, Auto 1430+: Disable , 11:8.2, 13.6:8.2,13.6:11,Auto
Eğrilik önleme	Geçerli , Geçersiz, Sıkışıklık önleme
Kağıt Besleme Yönü seçme	Arka besleme, Ön Besleme
Kağıt bitme vızıldama alarmı	Evet , Hayır
Kağıt Kesme Pozisyonu hafıza kaydı	Geçersiz, Algılama, Hafıza kayıt
Kağıt genişlik algılaması	Evet, Hayır
Kağıt eğrilik algılaması	Geçersiz , Normal, Tam
Siyah Çizgi algılama Modu	Evet, Hayır
Baskı Genişliği	1330: 8.0inch, 8.2inch , PaperWidth 1430+: 8.0inch, 8.2inch, 11.0inch ,PaperWidth
Kağıt uzunluğu hassas ayarlama	-20 -19 -18 -17 -16 -15 -14 -13 -12 -11 -10 -9 -8 -7 -6 -5 -4 -3 -2 -1 0 +1 +2 +3 +4 +5 +6 +7 +8 +9 +10 +11 +12 +13 +14 +15 +16 +17 +18 +19 +20

Bağlantı Ayarı	Geçerli ölçüler
PnP işlevi	Evet , Hayır
USB ID	Evet, Hayır

Karakter ayarı	Geçerli ölçüler
Karakter Set	Standart, IBM
Karakter Grubu	Grup I, Grup II
Uluslararası Kar. Seti	Amerika Bir.Devleti , Fransa, Almanya, İngiltere, Danimarka, İsveç, İtalya, İspanya, Japonya, Norveç, Danimarka II, İspanya II, Latin Amerika, Danimarka, Çin
Font	Roman , SansSerif, Courier, Prestige, Script, OCR B, OCR A, Orator, Gothic, Souvenir
Pitch(cpi)	10 , 12, 15, 16.6, 17.1, 20, 24, PROPORTIONAL
Code Page	CP437 , CP737, CP850, CP851, CP852, CP857, CP858, CP860, CP861, CP863, CP864, Extend864, CP865, CP866, Bulgaria866, CP1250, CP1251, CP1252, CP1253, CP1254, 8859_1, 8859_1SAP, 8859_2, 8859_5, 8859_7, 8859_9, 8859_15, BRASCI, Abicomp, Roman8, CoaxTwinax, New437, NewDig850, OldCode860, Flarro863, Hebrew865, CP1257, Ukraine866, Kazakhst866, Kamenicky, Mazovia, Baltic775, CROASCII, Farsi, Urdu, GreekDEC, ELOT928, UK_ASCII, US_ASCII, Swedish, German, Portuguese, French, Italian, Norwegian, Spanish, SiemensTurk, DECTurkish
15cpi Style	Small , Normal
AGM(IBM)	Evet, Hayır

Diğer Ayarlar	Geçerli ölçüler
Kağıt Uzunluğu Komutu	Evet , Hayır
Baskı Hızı Komutu	Evet, Hayır
Pitch Ctrl	Evet , Hayır
Font Ctrl	Evet, Hayır
Tek yön baskı Komutu	Si, No

5.6 Black Mark Parameters

This printer uses tractors to load fanfold forms with pre-printed black marks.

The printer requires 3 parameters to print on paper with black marks:

1. Horizontal offset of black mark from the edge of page (called Black Mark Physical Horizontal Position); later on, this value facilitates the printer to locate its scanner preparing for identifying the black marks.
2. Vertical offset of the first print line from the black mark (called Distance Offset From Black Mark To Print Position); later on, the print makes use of this value to print the first line relative to the black mark.
3. Vertical offset of the tear-off edge from the black mark (called Distance Offset From Black Mark To Tear Position); this value informs the printer the tear-off position of the page.



Not to skip or change the order of setting the above 3 parameters.

The procedures to set the parameters:

1. Hold down the **【Load/Eject】** key while powering on the printer and then release the key when the Print Head starts to move. After loading paper, the printer prompts the Printer Settings

Printer Settings

Keys act as proxies for designated functions in the setting dialog.

[LF]=Next, [TOP]=Back, [LOAD/EJECT]=OK, [ONLINE]=Exit, [ONLINE]+[LOAD/EJECT]= Save and restart the printer.

System Setup

2. Press the **Next** or **Back** keys to scroll forward or backward the sub-menus till the printer shows:

BlackMark Mode


3. Press **OK** to go into the BlackMark menu. The printer prompts:

[Black Mark Adjustment Mode]

[LF]=Next, [TOP]=Back, [LOAD/EJECT]=OK, [ONLINE]=Exit, [ONLINE]+[LOAD/EJECT]= Save and restart the printer.

Black Mark Physical Horizontal Position

Press any key to eject the paper, and load paper with black mark in the Fanfold Path.

4. The last prompt above advises you to press any key to unload the dialog form. Then load a fanfold form with black mark.
5. Ensure to place the lever at  position. Then press the **【Load/Eject】** key to load the black marked form. The top edge of the form will then align with the printer's tear-off

blade. Press **Next** or **Back** until you see the black mark marginally exposed out of the tear-off blade. Then press **OK** to allow the printer to scan the horizontal offset of the black mark relative to the left edge of the page. (Meanwhile, the vertical position of the black mark is measured and recorded.)

When the printer fails to scan the horizontal offset, it prompts you to repeat the above procedures. If scanning is successful, it prompts:

Successfully setup black mark parameters.

Distance Offset From Black Mark To Print Position

6. The last prompt above invites you to set the next parameter --- vertical offset of the first print line from the black mark. Like other setting dialogs, you have options:
 - 1) to bypass this setting (by pressing **Next** or **Back**), (**WARNING: Not to skip or change the order in Black Mark Setting.**)
 - 2) to accept the invitation (by pressing **OK**),
 - 3) to leave the subsequent settings (by press **Exit**), or
 - 4) to terminate the session and save modified parameter(s) (by pressing **Save and Restart**).
7. When you respond with "**OK**" to set the vertical offset, the printer prompts you to reload a black marked fanfold form:

Press any key to eject the paper, and load paper with black mark in the Fanfold Path.

8. The top edge of the form will then align with the printer's tear-off blade. Press **Next** or **Back** to feed or reverse-feed the paper till the desired first print line position is reached. (With the above measured vertical position, the printer will convert the net paper feeding to the TOF relative to the black mark.) Press **OK** to confirm the vertical offset. Then the print prompts the invitation for setting the tear-off position relative to the black mark:

Successfully setup black mark parameters.

Distance Offset From Black Mark To Tear Position

9. When you respond with **OK** to set the tear-off position, the printer prompts you to reload a black marked fanfold form:

Press any key to eject the paper, and load paper with black mark in the Fanfold Path.

10. The printer reloads the form. By default the form stops 5.5 inches away from the printer's tear-off blade. Press **Next** or **Back** to feed or reverse-feed the paper till the desired tear-off position is reached. (With the above measured vertical position, the printer will convert the net paper feeding to the tear-off position relative to the black mark.) Press **OK** to confirm the tear-off offset relative to the black mark. Finally, press **Save and Restart** to save new settings and terminate the session.

5.7 Bi-directional Alignment

When wiggling vertical grids appears in tabular reports, you should adjust the Bi-directional Alignment.

The procedures to adjust bi-directional alignment across adjacent line grids:

1. Hold down the **Load/Eject** key while powering on the printer and then release the key when the Print Head starts to move. After loading paper, the printer prompts the Printer Settings

Printer Settings

Keys act as proxies for designated functions in the setting dialog.

[LF]=Next, [TOP]=Back, [LOAD/EJECT]=OK, [ONLINE]=Exit, [ONLINE]+[LOAD/EJECT]=Save and restart the printer.

System Setup

2. Press the **Next** or **Back** keys to scroll forward or backward the sub-menus till the printer shows:

Bi-directional Alignment

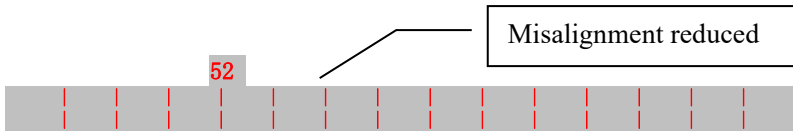
3. Press OK to go into the Bi-directional Alignment menu. The printer prompts:

[Bidirection Test]
[TOP]=-1, [LF]=+1, [LOAD/EJECT]=OK, [ONLINE]=Back, [ONLINE]+[LOAD/EJECT]=Save and restart the printer

Misalignment observed



- Every press on “+1” or “-1” shifts the second line to the right or left, respectively, relative to the top line by 1 fine step. After pressing “+1” twice and then “OK”, the printer prompts:



- Repeat the adjustment till two grid lines align satisfactory as “|”. Press “OK” again. The printer asks if you want to save the correction:

Save the parameter settings ([LOAD/EJECT] or [ONLINE] = OK, [LF] = Next)?
 Yes

- At this stage, you have the options to save or give up the correction by pressing **OK** or **Next**, respectively. If you respond with **OK**, an asterisk “*” appends to “Yes” to confirm saving change. If you intend to give up the correction by pressing **Next**, the printer prompts a “No” Then a confirmative response of **OK** appends an asterisk “*” to the “No” prompt. The printer then exits the Bi-directional Alignment and proceeds with the next setup menu.

5.8 Restore Factory Default

The procedures to restore factory default settings;

- Hold down the **Load/Eject** key while powering on the printer and then release the key when the Print Head starts to move. After loading paper, the printer prompts the Printer Settings

Printer Settings

Keys act as proxies for designated functions in the setting dialog.

[LF]=Next, [TOP]=Back, [LOAD/EJECT]=OK, [ONLINE]=Exit, [ONLINE]+[LOAD/EJECT]=
 Save and restart the printer.

System Setup

- Press the **Next** or **Back** keys to scroll forward or backward the sub-menus till the printer shows:

Restore Factory Default

Press OK to go into restore factory default dialog. The printer prompts:

[Restore Factory Default]

Restore factory settings ([LOAD/EJECT]=OK, [ONLINE]=Exit)?

Yes

3. At this stage you have the option of OK to restore default setting or Exit to discard the restoration.
4. If input OK, the printer prints an asterisk "*" appending the "Yes" and prompts successful restoration:

Restore factory settings successfully

5. The printer beeps once to indicate successful restoration.

5.9 Tally Dascom Printer Config Tool

"Tally Dascom Printer Config Tool" can be downloaded from our web:

<https://www.dascom.com/downloads.html>

This application enables a convenient, simple, and fast way to control your printer without touching any keys on the operation panel.


1. Start the tool installation by double clicking the "Tally Dascom Printer Config Tool Setup.msi".
2. Connect the printer to the system using USB cable
3. Power up the printer.
4. Run the tool from the Windows Start menu by selecting All Programs, then Dascom Printer Setup, and then Tally Dascom Printer Setup.
5. For more information on how to use the tool, go to the Help menu and select User Guide.

6 Customized Form

This printer allows the customization on the form length, TOF, bottom margin and left margin for single sheets and fanfold. Restore Factory Defaults can recover these default values.

Selecting the Define value(s) in section 5.3 (Paper Setup menu) allows the printer to take up the customized page formatting value(s).

The parameter setting procedures involve:

1. The printer prompts the dialogs and you follow the prompts.
2. Before every measurement or change, the print instructs you to unload the Setup Instruction Page from the printer.
3. With the exception of measuring the form length for cut sheets, always set the lever to the tractors position .
4. For form length measurement, insert the customized form from the proper paper path.

The other six settings are actually done on general fanfold forms --- not the actual customized form. Fanfold paper gives direct visual results on the TOF, bottom and left margins even though cut sheets will be used in actual applications.

6.1 Customize Cut Sheet Form Length

1. Hold down both the **【Online】** and **【TOF】** keys while powering on the printer and then release the keys when the carriage initializes and beeps once. After loading a form the printer prompts:

Customized Form

[LF]=Next, [TOP]=Back, [LOAD/EJECT]=OK, [ONLINE]=Exit, [ONLINE]+[LOAD/EJECT]=
Save and restart the printer.

Single sheet

Keys act as proxies for designated functions in the setting dialog.

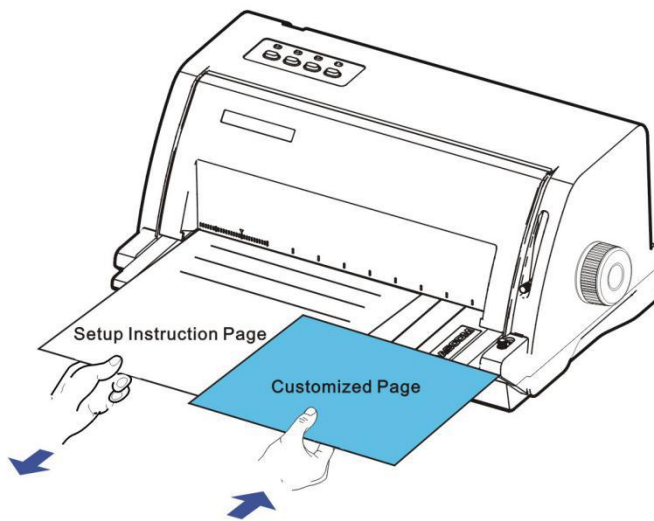
2. Press **“OK”** to start customizing all or part of 4 parameters for single sheet. The printer prompts:

[Single sheet]
Form Length

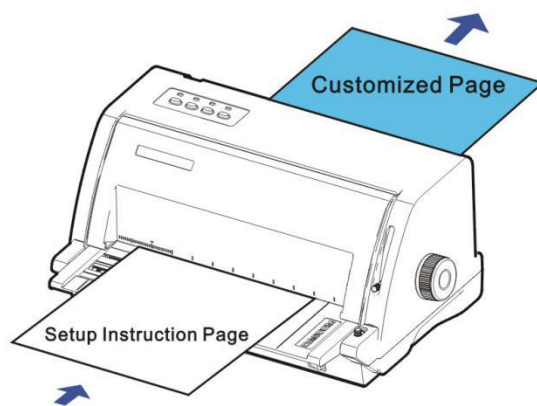
3. You may skip to other customized settings by pressing “**Next**” or “**Back**”. Once you press “**OK**” to continue with form length measurement, the printer prompts:

1. Press any key to clear the Setup Instructions Page from the printer. Insert the Customized Page into the corresponding paper path. Press [LOAD/EJECT] to load and measure the page length
2. The printer rolls over the entire Customized Page to measure its length. After measurement, press [LOAD/EJECT] to load a blank Setup Instructions Page to report the measured value.
3. Press [LOAD/EJECT] to save the measured value. Repeat the above steps if the printed value is dissatisfactory.

illustrations for above step 1 and step 2.



Remove Setup Instructions Page and insert Customized Page.



Insert a blank Setup Instructions Page to print out measured value.

4. Follow the given prompt to unload the Setup Instruction Page. Load the customized form to allow the printer to scan the page length. After the measurement, load another Setup Instruction Page to let the printer print out the measured length.

The measured form length is: 11.0”, approximately equal to 279mm,

accuracy of plus or minus 0.1 inches.

The measured value has been saved. Remeasure ([LOAD/EJECT]=OK, [ONLINE] =Exit)?

Yes

5. At this stage:

If **【Load/Eject】** key is pressed, an asterisk "*" is appended to "Yes" and you should repeat the procedures for form length measurement as mentioned. Or, If you input "Exit", the printer saves the measurement value and proceeds with the next customized setting.

6.2 Customize Cut Sheet TOF


1. After you follow through all the steps in 6.1 or you input "Next" in step 3 in 6.1, the printer prompts:

Top Margin

2. You may skip to other customized settings by pressing "Next" or "Back". Once you press "OK" to continue with customization of cut sheet TOF, the printer prompts:

Press any key to eject current page, load paper in the Fanfold paper path, and then proceed as follows:

[TOP] = -(1/72) inch, [LF] = +(1/72) inch, [LOAD/EJECT] = OK, [ONLINE] = Exit, [ONLINE] + [LOAD/EJECT] = Save and restart the printer.

3. Follow the given prompt to unload the Setup Instruction Page. Ensure the lever is at  position. Then press the **【Load/Eject】** key to load fanfold paper from tractors. The top edge of the form initially aligns with the printer's tear-off blade. You may input "+/- 1/72" to adjust the TOF position. When you get the desirable TOF, press **OK** or **Exit**. The printer prompts the customized TOF value:

The defined position is: 4.2 mm.

Save the parameter settings ([LOAD/EJECT] or [ONLINE]=OK, [LF]=Next)?

Yes

4. At this stage:

If **【Load/Eject】** key is pressed, an asterisk "*" is appended to "Yes" and you should repeat the procedures for form length measurement as mentioned. Or, If you input "Exit", the printer saves the measurement value and proceeds with the next customized setting.

6.3 Customize Cut Sheet Bottom Margin

1. After you follow through all the steps in 6.2 or you input “**Next**” twice in step 3 in 6.1, the printer prompts:

Bottom Margin

2. The remaining operations are nearly the same as described in section 6.2. The only difference is to input **+/- 1/72**” till you get the desirable bottom margin.

6.4 Customize Cut Sheet Left Margin

1. After you follow through all the steps in 6.3 or you input “**Next**” three times in step 3 in 6.1, the printer prompts:

Left Margin

2. The remaining operations are nearly the same as described in section 6.2. The only difference is to input **+/- 1/72**” till you get the desirable left margin.

6.5 Customize Fanfold Page Formatting Parameters

The customizations of the form length, TOF, bottom and left margins for fanfold are exactly the same as describe. All you need is to bypass the Single Sheet menu under Customize Form. Follow step 1 in section 6.1:

Customize Form

[LF]=Next, [TOP]=Back, [LOAD/EJECT]=OK, [ONLINE]=Exit, [ONLINE]+[LOAD/EJECT]=
Save and restart the printer.

Single sheet

Then hit “Next” instead to get into the fanfold parameter menus:

[Tractor Paper]
Form Length

Refer section 6.1 to 6.4 for details on customizing the form length, TOF, bottom margin, and left margin for fanfold.

7 Maintenance

Your printer requires very little care. Occasional cleaning and replacement of the Ribbon Cartridge are all that is required. Cleaning is recommended approximately every 6 months or 300 hours of operation, whichever is sooner. Lubrication of the printer is not usually necessary. If the print head carriage does not move smoothly back and forth, clean the printer in the manner described in this chapter. If the problem continues, contact your dealer to determine whether lubrication may be necessary.



Switch printer off and unplug the Power Cord from the mains before maintenance work.

7.1 Cleaning

The housing and the cover of the printer help protect it against dust, dirt, and other contaminants. However, paper produces small particles that accumulate inside the printer. This section explains how to clean and vacuum the printer and how to clean the paper bail rollers. It is easier to clean the printer when the cover is open.

7.2 Cleaning and Vacuuming the Printer

If the print head carriage does not move smoothly back and forth or paper particles have accumulated in the printer, clean the printer.

To clean and vacuum the printer:

1. Remove any paper from the printer. Make sure that the power is off, and then disconnect the printer Power Cord.
2. Using a soft vacuum brush, vacuum the exterior of the printer. Also vacuum the cut sheet edge.
3. Use a soft, damp cloth to wipe the exterior of the printer, including the cover. A mild detergent may be used. Do not use solvents, kerosene, or abrasive cleaning materials that may damage the printer.
4. Open the cover of the printer and remove the Ribbon Cartridge. Using a soft vacuum brush, gently vacuum the Platen, the print head carriage and shaft, and surrounding areas. You can easily slide the print head to the left or right when the power is off. Be careful not to press too hard on the flat head cable that extends from the print head carriage.
5. Re-install the Ribbon Cartridge.
6. Remove the single Sheet Feeder and clean the form tractors and the surrounding areas.
7. Re-install the single Sheet Feeder.

7.3 Cleaning the Paper Rollers

Clean the Platen and paper bail rollers occasionally or when stains or smudges appear on the paper. Use a mild detergent as appropriate. Do not use alcohol to clean the Platen or the rollers. Alcohol may cause the rubber to harden.

To clean the rollers and the Platen:

1. Apply a small amount of water to a soft cloth. Avoid spilling liquid inside the printer.
2. Place the cloth against the platen and manually rotate the Paper Feed Knob.
3. Repeat this procedure for each roller.
4. To dry the platen, place a dry cloth against the platen and the rollers and manually rotate the Paper Feed Knob.

8 Troubleshooting

Your printer is extremely reliable, but occasionally problems may occur. This chapter provides information on some of the common problems you may encounter and how you may solve them. If you encounter problems that you cannot resolve, contact your dealer or service partner for assistance.

8.1 Print Quality Problems and Solutions

Problem	Solution
Printing is too light or too dark.	<ul style="list-style-type: none"> ● Make sure that the Ribbon Cartridge is properly installed and that the ribbon feeds smoothly. ● Replace the ribbon if necessary. ● Make sure that the print gap lever is set for the thickness of your paper.
Smears and stains appear on the page.	<ul style="list-style-type: none"> ● Make sure that the print gap lever is set for the thickness of your paper. ● Check for ribbon wear. Replace the ribbon if necessary. ● Check whether the tip of the print head is dirty. Clean the head with a soft cloth if necessary. ● The print head may need to be replaced.
Printing is erratic or the wrong characters are printed. Many “?” or unexpected characters are printed.	<ul style="list-style-type: none"> ● Make sure that the interface cable is securely connected to both the printer and computer. ● Make sure that the printer driver selected in your software is the same as the emulation selected on the printer. ● Check the length of the interface cable. (Maximum Parallel & USB: 2 meters) ● Try another interface cable. ● Make sure the International Character Set selected is the correct one.
The page is blank.	<ul style="list-style-type: none"> ● Make sure that the Ribbon Cartridge is properly installed. ● Make sure the gap lever is set correctly.
Printing is vertically misaligned (jagged).	Use the printer's vertical alignment function to check the vertical print alignment. If necessary, adjust the print alignment.
The top margin is wrong.	<ul style="list-style-type: none"> ● Check the application top margin setting. ● Adjust the Top Margin setting in Page Setup menu if necessary.

Problem	Solution
Lines are double spaced instead of single spaced.	Change the Auto LF setting in the System Setup menu to No.
The printer overprints on the same line.	Change the Auto CR setting in the System Setup menu to No.
The next print line starts where the previous line ended instead of at the left margin.	Change the Auto CR setting in the System Setup menu to Yes.
Some dots are missing.	<ul style="list-style-type: none"> ● Use Change Pin function. ● The print head may need to be replaced. Contact your dealer.

8.2 Paper Handling Problems and Solutions

Problem	Solution
Paper cannot be loaded or fed.	<ul style="list-style-type: none"> ● Make sure that the paper select lever located on the top right of the printer is set correctly. Move the lever to the front for single sheets or to the rear for continuous forms. ● Make sure that the paper covers the paper-out sensor.
Paper jams while loading.	<ul style="list-style-type: none"> ● Turn off the printer and remove the jammed paper. Remove any obstructions from the paper path. ● Make sure that the Print Gap lever is set for the thickness of your paper. ● Make sure that the paper is not folded, creased, or torn. ● Make sure that the left and right tractors are set so that the continuous forms are stretched taut.
Paper jams while printing.	<ul style="list-style-type: none"> ● Turn off the printer and remove the jammed paper. Remove any obstructions from the paper path. ● Make sure that the Print Gap lever is set for the thickness of your paper. ● For continuous forms, make sure that the incoming and outgoing paper stacks are correctly placed. Paper should feed straight.
Paper slips off the forms tractors or the perforated holes of the paper tear during printing.	Make sure that the forms tractors are positioned correctly for the width of your paper and that the perforated holes of the paper fit directly over the tractor pins.

8.3 Operating Problems and Solutions

Problem	Solution
The power does not turn on.	<ul style="list-style-type: none"> ● Check whether the mains voltage is correct. ● Make sure that the Power Cord is securely connected to both the printer and the mains power outlet. ● Make sure that the power outlet is functional. If not so, use other outlet. ● Turn the power off. Wait a minute and then turn the printer on again. If the printer still has no power, contact your dealer.
The printer is on but it will not print.	<ul style="list-style-type: none"> ● Make sure that the Online indicator is lit. ● If you use the interface cable, make sure it is securely connected to both the printer and the computer. ● Make sure paper is loaded. ● Run the printer Status Page. If printing executes normally, the problem is caused by: the interface, the computer, incorrect printer settings, or incorrect software settings. ● Make sure the printer driver selected in your software is the same as the emulation selected on the printer.
Paper select lever error	<p>If paper is loaded and the paper select lever is moved to the incorrect position, the printer turns offline, and the buzzer sounds continuously. Switch the paper select lever back to its correct position.</p>

8.4 Printer Failures

A user cannot generally resolve a problem involving defective printer hardware. Power off and on again the printer to recover any fatal error. If the problem cannot be resolved, contact your dealer or service partner.

8.5 Error Indications on LEDs

Error Description / Operation Status	Power LED	Paper Exit LED	Speed LED	Online LED	Buzzer Sound
EEPROM	Off	Off	Off	Flashing	None
Print Head temperature is too low	Flashing	Off	Off	Flashing	None
Carriage initial position	Off	Off	Flashing	Flashing	Continuous
Raster reading trouble	Off	Off	Flashing	Flashing	Continuous
Front feed Sensor trouble	Off	Off	On	Flashing	None
Paper width trouble	Off	Off	On	On	Once
Paper jam	Flashing	No change	No change	On	Once
Print Head too hot	Flashing	Flashing	No change	Flashing	None
Paper path switching trouble	Flashing	No change	No change	Flashing	Continuous
Paper end rear Sensor trouble	Off	Off	On	Off	None
Print Head temperature is too low	Flashing	Off	Off	Flashing	None
Carriage initial position	Off	Off	Flashing	Flashing	Continuous

8.6 Diagnostic Functions

The printer diagnostic functions are Self-Test page, hex-dump mode and print alignment adjustment.

- **Self-Test page:** Tells you whether the printer hardware is functioning correctly. If the printer hardware is functional, any problems you are having are probably caused by incorrect printer settings, incorrect software settings, the interface, or the computer.
- **HEX-DUMP MODE:** Allows you to determine whether the computer is sending the correct commands to the printer, and whether the printer is executing the commands correctly. This function is useful to programmers or others who understand how to interpret hex dumps.
- **PRINTING ALIGNMENT ADJUSTMENT:** Allows you to check and, if necessary, correct the printer's vertical line print alignment in bi-directional mode.

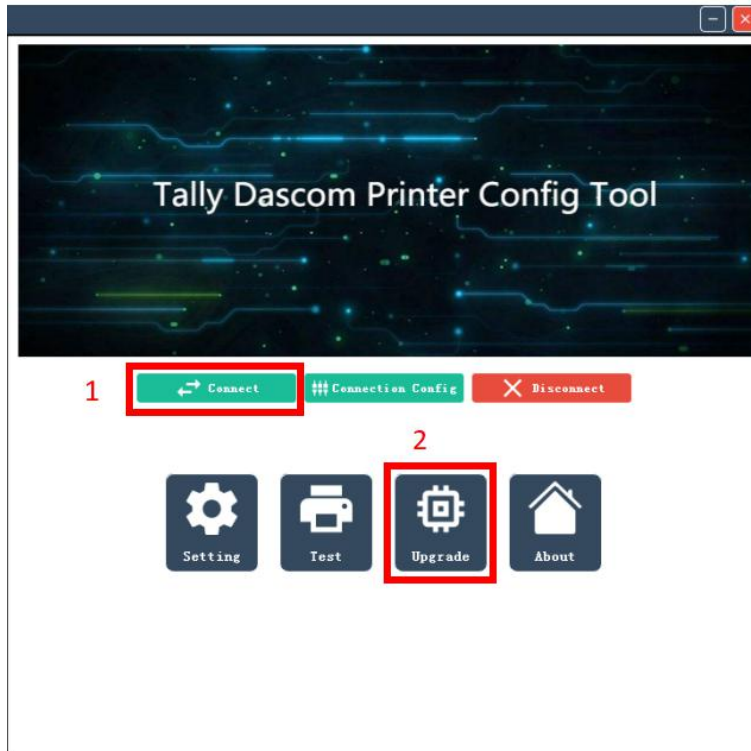
8.7 Firmware Update

Sometimes it is necessary to update the firmware to solve a problem. The latest firmware file may be obtained from your dealer or downloaded from our website www.dascom.com. Before updating firmware, it is strongly recommended to print the Main Menu page to keep a record of the old settings.

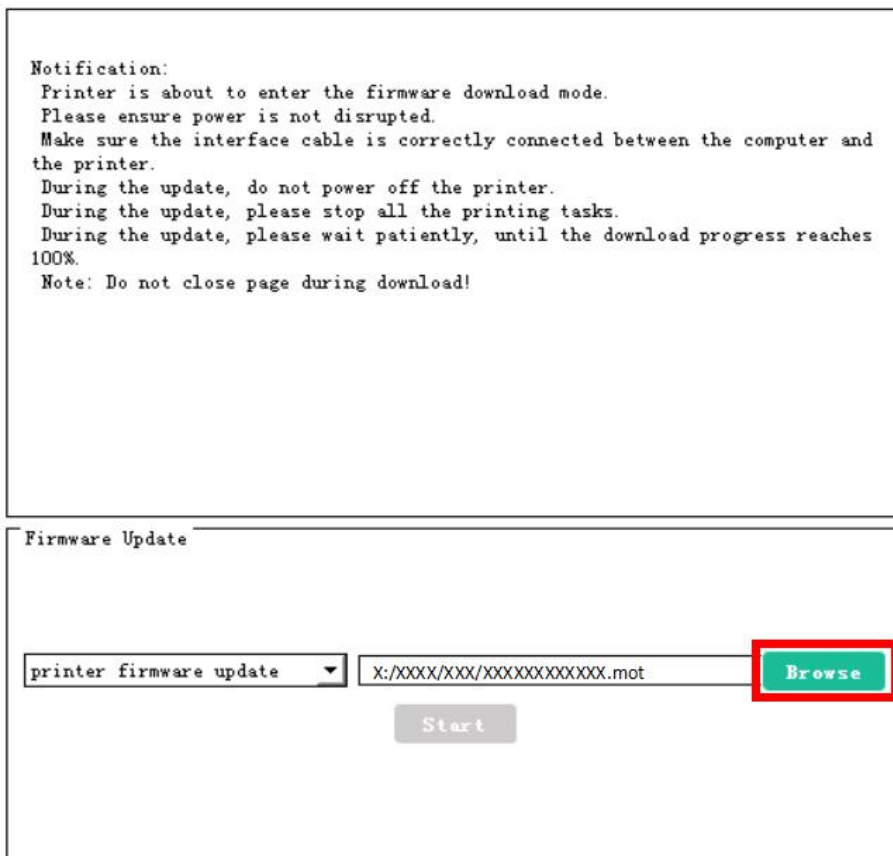
Note: Firmware update should only be performed by an authorized service person. We disclaim any responsibility for any damage caused if it is performed by any other person.

To load new firmware, proceed as follows:

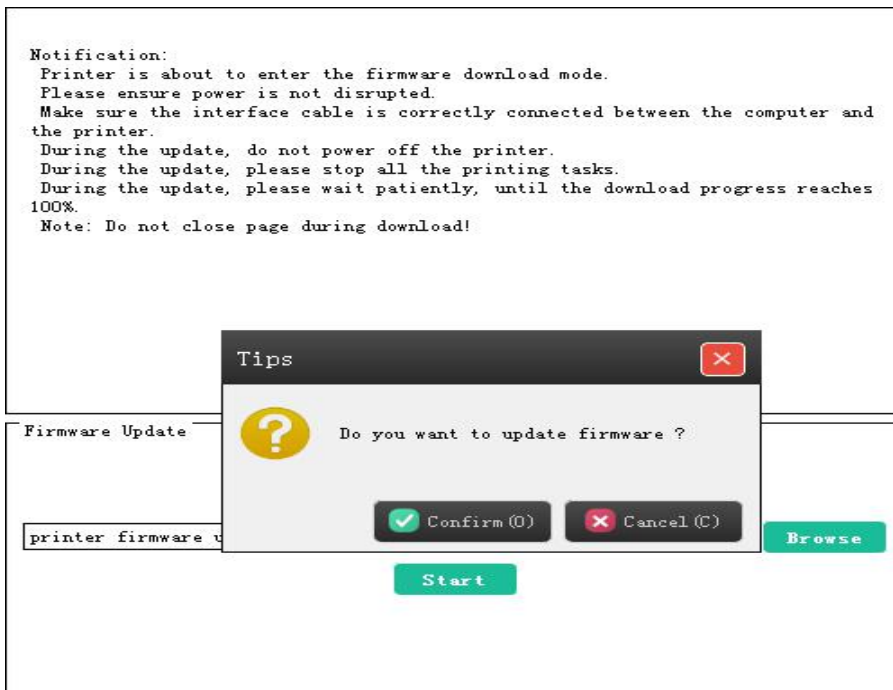
1. Switch off the printer. Connect your PC to the USB port on the printer.
2. Link Configuration Tool and then click “Update” as shown in below picture:



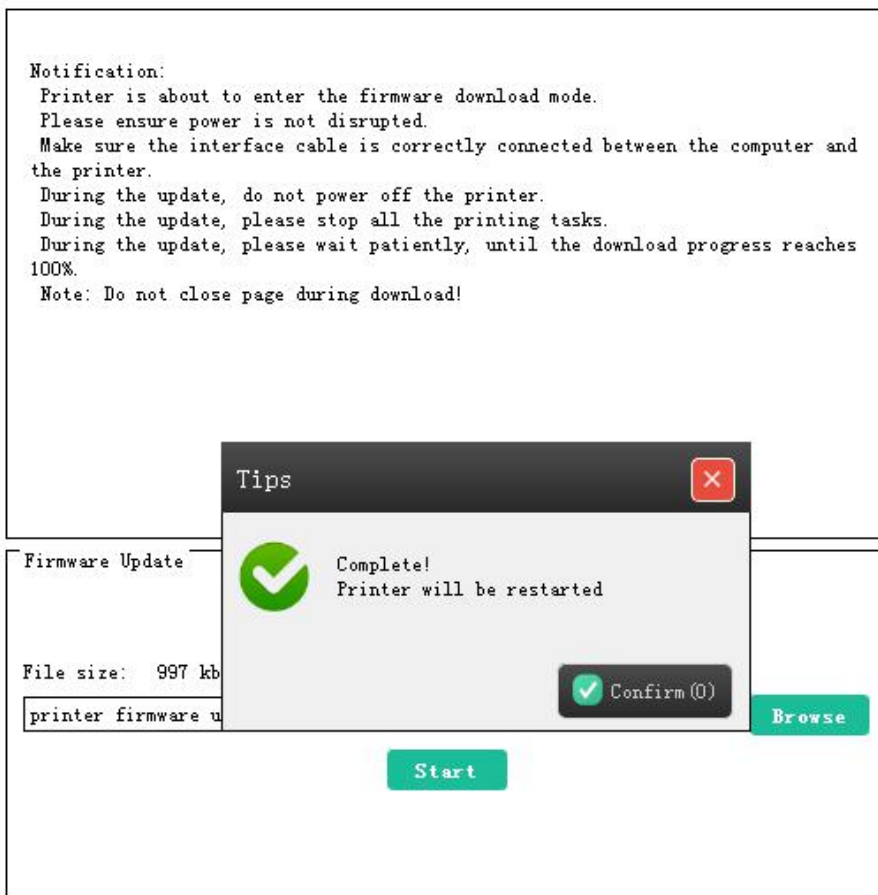
3. Locate the firmware file by clicking Browse.



4. Click Start. A message box pops up to ask for confirmation; click Confirm.



5. When the progress bar reaches 100%, the upgrade process is completed and the printer will be restarted.



9 General Specifications

Print System	Serial impact dot matrix			
Print Technology	Uni-/bi-directional logic seeking for text and graphics (software selectable)			
Print Speed	Pitch	DRAFT	NLQ	LQ
	10 CPI	300 CPS	200 CPS	100 CPS
	12 CPI	360 CPS	240 CPS	120 CPS
	15 CPI	450 CPS	300 CPS	150 CPS
	17 CPI	510 CPS	340 CPS	170 CPS
	20 CPI	600CPS	400 CPS	200 CPS
Print Head	Number of pins: 24 pins/ 12x2 staggered Life: 400 million strokes/pin Pin diameter: 0.2 mm			
Font	Roman, Sans Serif, Courier, Prestige, Script, OCR-B,OCR-A, ORATOR,GOTHIC,SOUVENIR			
Emulation	ESC/P2, IBM 2390+			
Character Set	Standard character set I,Standard character set II IBM character set I,IBM character set II OCR-A character set I,OCR-A character set II OCR-B character set I,OC-B character set II International Character sets:15 country (see the note) Note:USA,France,Germany,UK,Denmark I,Sweden,Italy,Spain I,Japan, Norway,Denmark II,Spain II,Latin America,Denmark/Norway,China			
Printable Columns	Characters per line (CPL)	1330:	1430+:	
	Pica (10 CPI)	82CPL	110CPL	
	Elite(12 CPI)	98CPL	132CPL	
	Micron(15 CPI)	123CPL	165CPL	
	Condensed(17.1 CPI)	140CPL	188CPL	
	Condensed Elite(20 CPI)	164CPL	220CPL	
	Proportional	changeable	changeable	
Font Matrix	Character	Matrix(Draft)	Matrix(NLQ)	Matrix(LQ)
	Pica	24*12		24*36
	Elite	24*10	24*18	24*30
	Super/Subscript	16*8	24*15	16*24
	Proportional		16*12	24*n
	Proportional super/subscript			16*n

Graphics	Graphics Matrix	DPI
	8*480(single density)	60
	8*960(double density)	120
	8*960(high speed double density*)	120
	8*1920(quadruple density*)	240
	8*640(CRT I)	80
	8*720(CRT II)	90
	24*480(single density)	60
	24*960(double density)	120
	24*720(CRT III)	90
	24*1440(triple)	180
24*2880(sextuple*)	360	
	(note: the asterisk marks only printing one adjacent dot)	
Line Spacing	1/6", 1/8", n/60", n/180", n/360"	
Paper Specifications	Paper type: Single ply, Fanfold paper, Label, Cheque, Card and Envelope, Multilayer paper	
	Paper thickness: Maximum thickness is 1.0mm	
	Paper size:	
	1330: Cut Sheet Width:55mm~297mm (2.2"~11.7") Length:55mm~559mm (2.2"~22")	Fanfold Paper Width:55mm~290mm (2.2"~11.4") Length:76mm~559mm (3"~22")
1430+: Cut Sheet Width:55mm~371mm (2.2" ~14.6") Length:55mm~305mm (2.2"~12")	FanfoldPaper Width: 55mm~355.6mm (2.2"~14") Length:76mm~559mm (3"~22")	
Paper Feed method	Push tractor(Fanfold paper) Friction (Cut sheet)	
Paper Feed Speed	8.0 IPS (inches per second)	
Copy Capability	1330: Original + 6 copy	1430+: Original + 7 copy
Ribbon Type	Cartridge,monochrome/black	
Ribbon Life	9 million characters at Draft/10 CPI	
Buffer Capability	Up to 256KB	
Interface	Standard: USB Options: Parallel, Serial, Ethernet, WiFi, Bluetooth	
Noise Level	Approx. 57dB(A)	

Ambient Conditions	Temperature	Operating: +0 to +45 °C Stand-by: -20 to +55 °C
	Humidity	Operating: 10 to 96%RH(No condensation) Stand-by: 5 to 96%RH (No condensation)
MTBF	12,000 hours	
MVBF	24 mil lines	
Dimensions	1330:	1430+:
	395mm(L)×320mm (W)×205mm(H) 15.55"(L)×12.60"(W)×8.07"(H)	463mm(L)×320mm (W)×205mm(H) 18.23"(L)×12.6"(W)×8.07"(H)
Weight	1330: 4.2kg	1430+: 6.6kg
Power Supply	Voltage rating: AC220V~240V or AC100V~120V Frequency:50/60Hz (Power Supply is supplied according to different voltage of different regions)	
Power consumption	Rated Power:34W Sleep Mode: 1.4W	
Environmental Protection	Conform to HJ/T302-2006 《Technical Requirements of Environmental protection product for Printer, Fax and Multi-function machine》 Conform to requirements of Pollution Controlling and Management Method of Electronic products.	
Certification	CE, UL, FCC, RoHS, WEEE, REACH, ChemVerbotsV, Microsoft Certified for Windows 7, Windows 8.1, Windows 10, Windows Server 2012R2, Windows Server 2014	

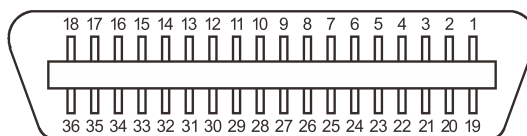
10 Interface

10.1 Parallel Interface

Parallel Interface Pin Assignment

Pin	Signal Name	Signal Transmission
1	STROBE	Printer ← Computer
2~9	DATA	Printer ← Computer
10	ACK	Printer → Computer
11	BUSY	Printer → Computer
12	PE	Printer → Computer
13	SELECT	Printer → Computer
14	AFXT	Printer ← Computer
15	Unused	Unused
16	GND	Printer ↔ Computer
17	F-GND	Printer ↔ Computer
18	+5V	Printer → Computer
19~30	GND	Printer ↔ Computer
31	INIT	Printer ← Computer
32	FAULT	Printer → Computer
33	GND	Printer ↔ Computer
34	Unused	Unused
35	FUSE	Printer → Computer
36	SLCTIN	Printer ← Computer

Parallel Interface Connector Diagram



Any external devices connected to the parallel port should not draw current exceeding 200 mA from pin 18; otherwise it may affect the printer operation.

10.2 USB Interface

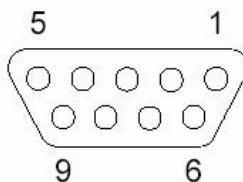
The USB interface conforms to the Universal Serial Bus 2.0 Specifications. It supports the Full Speed mode at 12 Mbps. It uses the “B” type USB connector.

10.3 Serial interface

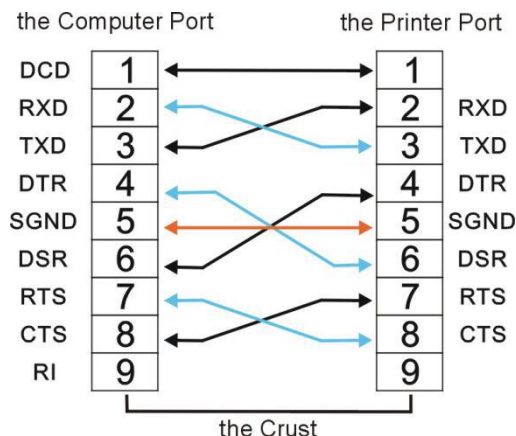
Serial interface pin assignment

Pin	Signal name	Description
1		
2	RXD	Receive data
3	TXD	Send data
4	DTR	Data terminal ready
5	SGND	Signal ground
6	DSR	Data set ready
7	RTS	Request to send
8	CTS	Clear to send
9		

Serial interface connector diagram



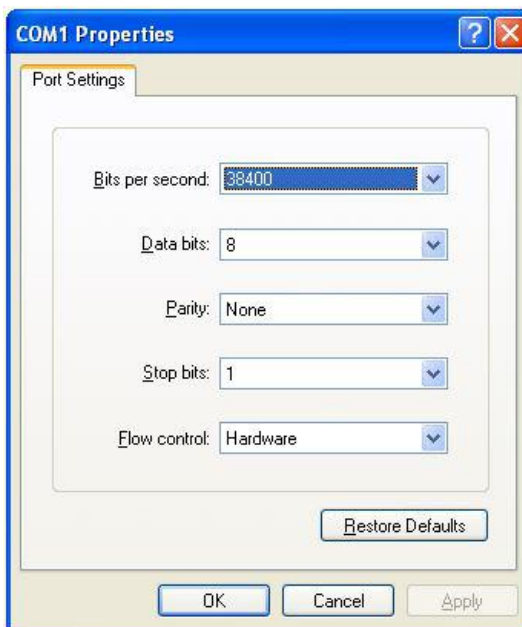
Serial interface wiring diagram



Note:

1. The serial cable length should not exceed 15 meters.
2. Make sure the “Interface Setup” selects serial interface and the settings are the same as PC communication port settings. Shown as below:

Interface:	Share	Share
Baud Rate:	38400	38400
Data Bit:	8	8
Parity Check:	None	None
Stop Bit:	1	1
Data Stream:	Hardware	Hardware



The following settings are possible with the RS-232 9 Pin interface, while the bold settings are factory default settings.


- Baud Rate: 1200, 2400, 4800, 9600, 19200, **38400**, 115200
- Data Bit: 7, **8**
- Parity Check: **None**, Odd, Even
- Stop Bit: **1**, 2
- Data Stream: No, **Hardware**, Xon/Xoff

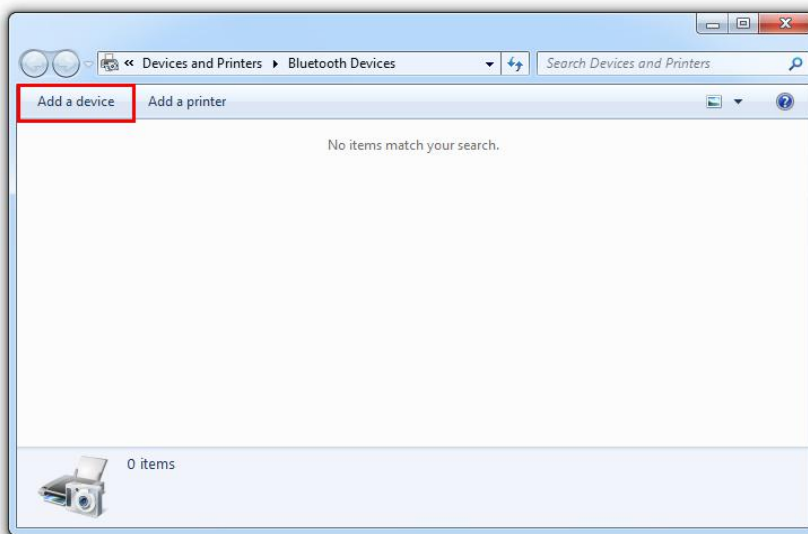
10.4 Bluetooth interface

Install Bluetooth adapter (V2.0 or above version) prepared by yourself in the PC via USB interface.

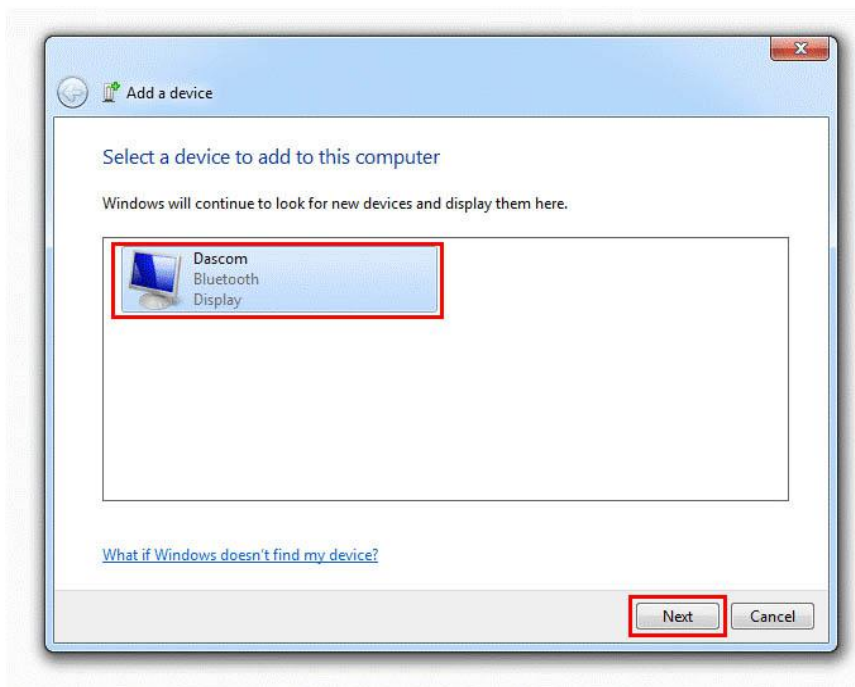
The effective range of the Bluetooth is 10 meters, so make sure the distance between the printer and the PC is within this range. The baud rate is 38400.

Follow below steps to install Bluetooth adapter driver.

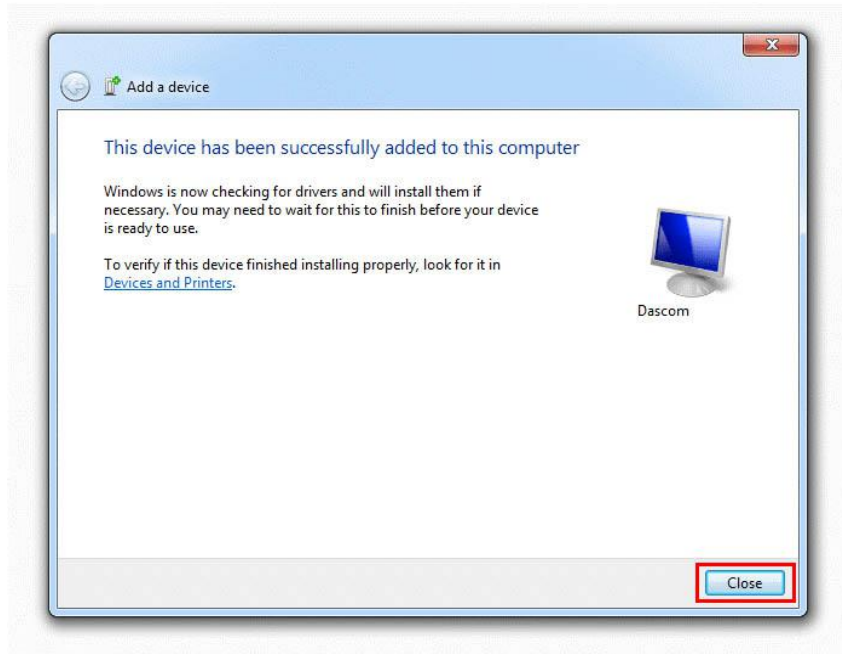
1. Double click the Bluetooth icon  at lower right corner on the PC screen. You will see the following window then Click “Add a device”.



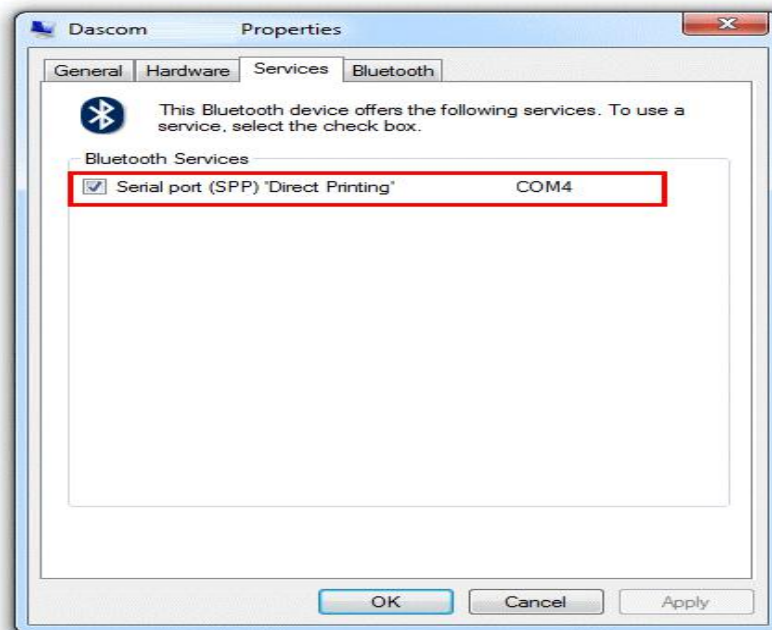
2. Select “Device is ready for searching”, and then click the model name for searching the Bluetooth printer. And enter Next to continue.



3. Then the bluetooth adapter has been installed in the computer.



4. Check the port type under the table of Services. In this case, it is COM4.

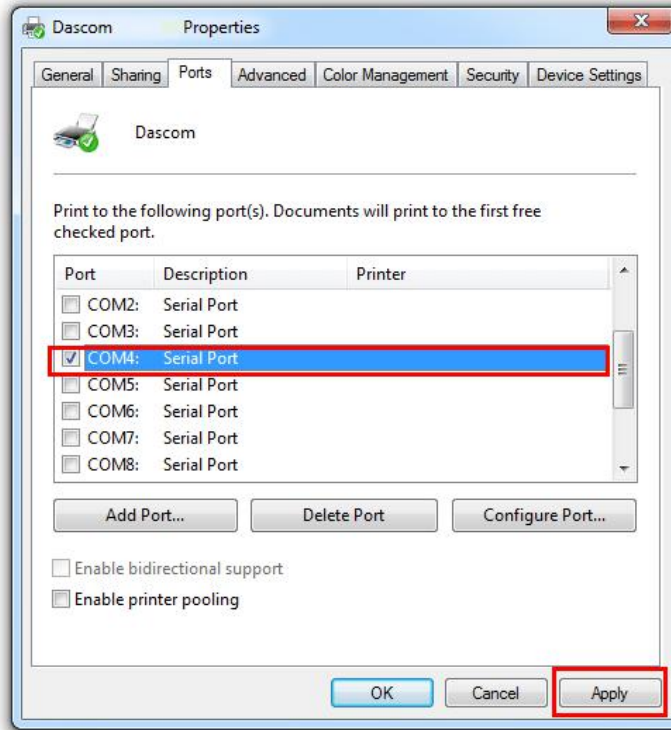


Note:

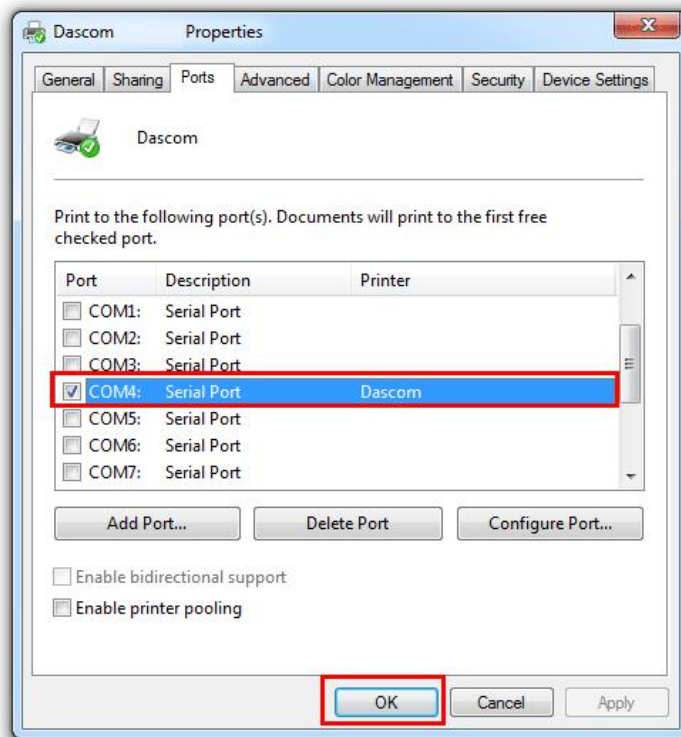
1. If connection failed, please check the distance between the printer and the computer is within 10m and power is on. You may restart the printer or the computer to try again.
2. Make sure the PC Bluetooth adapter is working, it is installed properly and connected to the computer.
3. If the computer reports the pin is wrong, please make sure you enter four-number password (0000).

Follow below process to change Driver Port of PC:

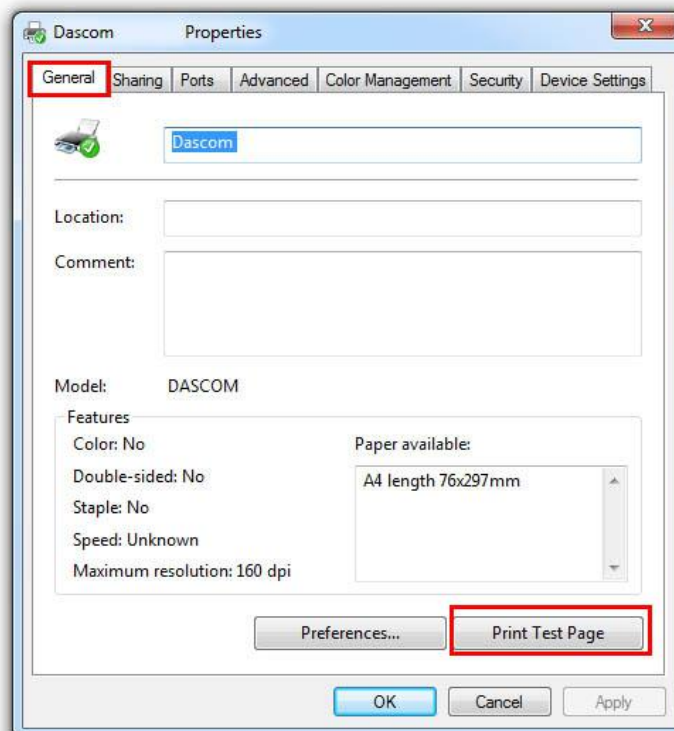
1. Right click the printer, select Properties → Ports, and select the output port that you have put down (in the case COM4) then click “Apply”.



2. COM4 for the printer is checked.



3. Select “General” and click “Print test page” for checking Bluetooth performance.



Note:

If failed to print Test Page, please check if you select the right Port Type in the computer.

11 Code Pages

11.1 Character Set

Standard character set 1

	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
0	NUL		SP	0	@	P	¢	p	NUL		0	@	P	¢	p	
1		DC1	!	1	A	Q	a	q		DC1	/	/	A	Q	a	q
2		DC2	"	2	B	R	b	r		DC2	"	2	B	R	b	r
3		DC3	#	3	C	S	c	s		DC3	#	3	C	S	c	s
4		DC4	\$	4	D	T	d	t		DC4	\$	4	D	T	d	t
5			%	5	E	U	e	u			%	5	E	U	e	u
6			&	6	F	V	f	v			&	6	F	V	f	v
7	BEL		'	7	G	W	g	w	BEL		'	7	G	W	g	w
8	BS	CAN	(	8	H	X	h	x	BS	CAN	(	8	H	X	h	x
9	HT		)	9	I	Y	i	y	HT		)	9	I	Y	i	y
A	LF		*	:	J	Z	j	z	LF		*	:	J	Z	j	z
B	VT	ESC	+	;	K	[	k	{	VT	ESC	+	;	K	[	k	{
C	FF	FS	,	<	L	\	l	|	FF	FS	,	<	L	\	l	|
D	CR		-	=	M	]	m	}	CR		-	=	M	]	m	}
E	SO		.	>	N	^	n	~	SO		.	>	N	^	n	~
F	SI		/	?	O	_	o	|	SI		/	?	O	_	o	DEL

Standard character set 2

	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
0	NUL		SP	0	@	P	¢	p	ª	§		0	@	P	¢	p
1		DC1	!	1	A	Q	a	q	é	ß	/	/	A	Q	a	q
2		DC2	"	2	B	R	b	r	ü	£	"	2	B	R	b	r
3		DC3	#	3	C	S	c	s	ó	¤	#	3	C	S	c	s
4		DC4	\$	4	D	T	d	t	í	ø	\$	4	D	T	d	t
5			%	5	E	U	e	u	•	º	%	5	E	U	e	u
6			&	6	F	V	f	v	£	™	&	6	F	V	f	v
7	BEL		'	7	G	W	g	w	ï	ˆ	'	7	G	W	g	w
8	BS	CAN	(	8	H	X	h	x	¿	ø	(	8	H	X	h	x
9	HT		)	9	I	Y	i	y	ñ	ó	)	9	I	Y	i	y
A	LF		*	:	J	Z	j	z	ñ	£	*	:	J	Z	j	z
B	VT	ESC	+	;	K	[	k	{	¤	º	+	;	K	[	k	{
C	FF	FS	,	<	L	\	l	|	®	ü	,	<	L	\	l	|
D	CR		-	=	M	]	m	}	ˆ	ˆ	-	=	M	]	m	}
E	SO		.	>	N	^	n	~	ª	é	.	>	N	^	n	~
F	SI		/	?	O	_	o	|	¢	£	/	?	O	_	o	DEL

IBM character set 1

	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
0	NUL		SP	0	@	P	'	p	NUL		á	⋮	⊥	⊥	α	≡
1		DC1	!	1	A	Q	a	q		DC1	í	⊗	⊥	⊥	β	±
2		DC2	"	2	B	R	b	r		DC2	ó	⊗	⊥	⊥	Γ	≥
3		DC3	#	3	C	S	c	s		DC3	ú	|	⊥	⊥	π	≤
4		DC4	\$	4	D	T	d	t		DC4	ñ	⊥	⊥	⊥	Σ	∫
5			%	5	E	U	e	u			Ñ	⊥	⊥	⊥	σ	∫
6			&	6	F	V	f	v			a	⊥	⊥	⊥	μ	+
7	BEL		'	7	G	W	g	w	BEL		o	⊥	⊥	⊥	τ	≈
8	BS	CAN	(	8	H	X	h	x	BS	CAN	¿	⊥	⊥	⊥	Φ	°
9	HT		)	9	I	Y	i	y	HT		⊥	⊥	⊥	⊥	Θ	•
A	LF		*	:	J	Z	j	z	LF		⊥	⊥	⊥	⊥	Ω	.
B	VT	ESC	+	;	K	[	k	{	VT	ESC	½	⊥	⊥	■	δ	√
C	FF	FS	,	<	L	\	l	|	FF	FS	¼	⊥	⊥	■	∞	n
D	CR		-	=	M	]	m	}	CR		ı	⊥	⊥	■	∅	₂
E	SO		.	>	N	^	n	~	SO		«	⊥	⊥	■	ε	■
F	SI		/	?	O	_	o	|	SI		»	⊥	⊥	■	∩	SP

IBM character set 2

	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
0	NUL		SP	0	@	P	'	p	Ç	É	á	⋮	⊥	⊥	α	≡
1		DC1	!	1	A	Q	a	q	ü	æ	í	⊗	⊥	⊥	β	±
2		DC2	"	2	B	R	b	r	é	Æ	ó	⊗	⊥	⊥	Γ	≥
3	♥	DC3	#	3	C	S	c	s	â	ô	ú	|	⊥	⊥	π	≤
4	♦	DC4	\$	4	D	T	d	t	ã	ö	ñ	⊥	⊥	⊥	Σ	∫
5	♣	§	%	5	E	U	e	u	à	ò	Ñ	⊥	⊥	⊥	σ	∫
6	♠		&	6	F	V	f	v	â	û	a	⊥	⊥	⊥	μ	+
7	BEL		'	7	G	W	g	w	ç	ù	o	⊥	⊥	⊥	τ	≈
8	BS	CAN	(	8	H	X	h	x	ê	ÿ	¿	⊥	⊥	⊥	Φ	°
9	HT		)	9	I	Y	i	y	ë	Ö	⊥	⊥	⊥	⊥	Θ	•
A	LF		*	:	J	Z	j	z	è	Ü	⊥	⊥	⊥	⊥	Ω	.
B	VT	ESC	+	;	K	[	k	{	ï	ø	½	⊥	⊥	■	δ	√
C	FF	FS	,	<	L	\	l	|	î	£	¼	⊥	⊥	■	∞	n
D	CR		-	=	M	]	m	}	ì	¥	ı	⊥	⊥	■	∅	₂
E	SO		.	>	N	^	n	~	Ä	Pt	«	⊥	⊥	■	ε	■
F	SI		/	?	O	_	o	|	Å	f	»	⊥	⊥	■	∩	SP

OCR-A character set 1

	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
0	NUL		SP	0	1	P	'	p	NUL							
1		DC1	4	1	A	Q	a	q		DC1						
2		DC2	"	2	B	R	b	r		DC2						
3		DC3	!	3	C	S	c	s		DC3						
4		DC4	#	4	D	T	d	t		DC4						
5			%	5	E	U	e	u								
6			&	6	F	V	f	v								
7	BEL		'	7	G	W	g	w	BEL							
8	BS	CAN	{	8	H	X	h	x	BS	CAN						
9	HT		}	9	I	Y	i	y	HT							
A	LF		.	:	J	Z	j	z	LF							
B	VT	ESC	+	;	K	[	k	(	VT	ESC						
C	FF	FS	~	]	L	\	l	|	FF	FS						
D	CR		-	=	M	]	m	)	CR							
E	SO		.	^	N	^	n	~	SO							
F	SI		/	?	0	_	o	■	SI							

OCR-A character set 2

	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
0	∅	▶	SP	0	1	P	'	p								
1	☺	◀	4	1	A	Q	a	q								
2	☹	↕	"	2	B	R	b	r								
3	♥	!!	!	3	C	S	c	s								
4	♦	†	#	4	D	T	d	t								
5	♣	§	%	5	E	U	e	u								
6	♠	-	&	6	F	V	f	v								
7	•	‡	'	7	G	W	g	w								
8	■	↑	{	8	H	X	h	x								
9	◦	↓	}	9	I	Y	i	y								
A	■	→	.	:	J	Z	j	z								
B	♂	←	+	;	K	[	k	(
C	♀	↳	~	]	L	\	l	|								
D	♪	↔	-	=	M	]	m)								
E	🎵	▲	.	^	N	^	n	~								
F	☼	▼	/	?	0	_	o	■								

OCR-B character set 1

	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
0	NUL		SP	0	@	P	`	p	NUL							
1		DC1	!	1	A	Q	a	q		DC1						
2		DC2	"	2	B	R	b	r		DC2						
3		DC3	#	3	C	S	c	s		DC3						
4		DC4	\$	4	D	T	d	t		DC4						
5			%	5	E	U	e	u								
6			&	6	F	V	f	v								
7	BEL		'	7	G	W	g	w	BEL							
8	BS	CAN	(	8	H	X	h	x	BS	CAN						
9	HT		)	9	I	Y	i	y	HT							
A	LF		*	:	J	Z	j	z	LF							
B	VT	ESC	+	;	K	[	k	{	VT	ESC						
C	FF	FS	,	<	L	\	l	|	FF	FS						
D	CR		-	=	M	]	m	}	CR							
E	SO		.	>	N	^	n	~	SO							
F	SI		/	?	O	_	o	■	SI							

OCR-B character set 2

	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
0	∅	▶	SP	0	@	P	`	p								
1	☺	◀	!	1	A	Q	a	q								
2	☺	↑	"	2	B	R	b	r								
3	♥	!!	#	3	C	S	c	s								
4	♦	!\$	\$	4	D	T	d	t								
5	♣	\$%	%	5	E	U	e	u								
6	♠	-	&	6	F	V	f	v								
7	•	±	'	7	G	W	g	w								
8	■	↑	(	8	H	X	h	x								
9	•	↓	)	9	I	Y	i	y								
A	■	→	*	:	J	Z	j	z								
B	♂	←	+	;	K	[	k	{								
C	♀	└	,	<	L	\	l	|								
D	♪	↔	-	=	M	]	m	}								
E	🎵	▲	.	>	N	^	n	~								
F	✱	▼	/	?	O	_	o	■								

International Character Set Commands

Country	Basic Command
USA	<ESC>"R"CHR\$(0)
FRANCE	<ESC>"R"CHR\$(1)
GERMANY	<ESC>"R"CHR\$(2)
UK	<ESC>"R"CHR\$(3)
DENMARK 1	<ESC>"R"CHR\$(4)
SWEDEN	<ESC>"R"CHR\$(5)
ITALY	<ESC>"R"CHR\$(6)
SPAIN 1	<ESC>"R"CHR\$(7)
JAPAN	<ESC>"R"CHR\$(8)
NORWAY	<ESC>"R"CHR\$(9)
DENMARK 2	<ESC>"R"CHR\$(10)
SPAIN 2	<ESC>"R"CHR\$(11)
LATINAMERICA	<ESC>"R"CHR\$(12)
DENMARK/NORWAY	<ESC>"R"CHR\$(13)
CHINA	<ESC>"R"CHR\$(16)

International character sets:

Character Code (Hex)												
Character Set	23	24	40	5B	5C	5D	5E	60	7B	7C	7D	7E
0: U. S. A.	#	\$	@	[	\	\]	^	^	{	|	}	~
1: FRANCE	#	\$	à	°	ç	§	^	é	é	ù	è	~
2: GERMANY	#	\$	§	Ä	Ö	Ü	^	ä	ö	ü	ß	
3: U. K.	£	\$	@	[	\	\]	^	^	{	|	}	~
4: DENMARK 1	#	\$	@	Æ	Ø	Å	^	æ	Ø	å	~	
5: SWEDEN	#	□	É	Ä	Ö	Å	Ü	é	ä	Ö	å	ü
6: ITALY	#	\$	@	°	\	é	^	ù	à	ò	è	ì
7: SPAIN 1	Pt	\$	@	ı	Ñ	ı	^	~	ñ	}	~	
8: JAPAN	#	\$	@	[	¥	]	^	^	{	|	}	~
9: NORWAY	#	□	É	Æ	Ø	Å	Ü	é	æ	Ø	å	ü
10: DENMARK 2	#	\$	É	Æ	Ø	Å	Ü	é	æ	Ø	å	ü
11: SPAIN 2	#	\$	á	ı	Ñ	ı	é	ı	ñ	ó	ú	
12: LATIN AMERICA	#	\$	á	ı	Ñ	ı	é	ü	ı	ñ	ó	ú
13: DENMARK/NORWAY	#	\$	@	[	\	\]	^	^	{	|	}	~
14: CHINA	#	¥	@	[	\	\]	^	^	{	|	}	~

11.2 Code Page Commands

Code Page	ESC R Parameter
ISO_8859-1	25
ISO_8859_1SAP	2B
ISO_8859_2	26
ISO_8859_5	2A
ISO_8859_7	2D
ISO_8859_9	2E
ISO_8859_15	2F
CRO_ASCII	3C
UK_ASCII	41
US_ASCII	42
Greek_DEC	46
Swedish	48
German	4B
Portuguese	4C
Roman_8	4D
Coax_Twinax	4F
French	52
Italian	59
Spanish	5A
Norwegian	60
ELOT_928	6C
BRASCII	6D
Abicomp	6E
Table_1250	70
Table_1251	71
Table_1252	72
Table_1253	73
Table_1254	74
Table_437	80
NEW_437	81
Table_850	82
New_Dig_850	83
Table_860	84
Table_863	85
Table_865	86
Table_852	87
Table_851	88
Table_864	8C
Table_857	8D
Table_866	8E
Kamenicky	91
Mazovia	92
Table_737	93
Table_861	94

Code Page	ESC R Parameter
Extended_864	95
Farsi	96
Urdu	97
Old_Code_860	98
Flarro_863	99
Table_865	9A
Siemens_Turkish	9B
DEC_Turkish	9C
Bulgaria_866	9D
Table_858	9E

11.3 Code Page Tables

CP_437

hex	0	1	2	3	4	5	6	7	8	9	a	b	c	d	e	f
dez	0	16	32	48	64	80	96	112	128	144	160	176	192	208	224	240
0			0	@	P	'	p	Ç	É	á	⌘	⌘	⌘	⌘	⌘	⌘
1		!	1	A	Q	a	q	ü	æ	í	⌘	⌘	⌘	⌘	⌘	⌘
2		"	2	B	R	b	r	é	Æ	ó	⌘	⌘	⌘	⌘	⌘	⌘
3		#	3	C	S	c	s	â	ô	ú	⌘	⌘	⌘	⌘	⌘	⌘
4		\$	4	D	T	d	t	ä	ö	ñ	⌘	⌘	⌘	⌘	⌘	⌘
5		%	5	E	U	e	u	à	ò	Ñ	⌘	⌘	⌘	⌘	⌘	⌘
6		&	6	F	V	f	v	å	û	ä	⌘	⌘	⌘	⌘	⌘	⌘
7		'	7	G	W	g	w	ç	ù	ó	⌘	⌘	⌘	⌘	⌘	⌘
8		(	8	H	X	h	x	ê	ÿ	¿	⌘	⌘	⌘	⌘	⌘	⌘
9		)	9	I	Y	i	y	ë	ÿ	¸	⌘	⌘	⌘	⌘	⌘	⌘
a		*	:	J	Z	j	z	è	Ü	¸	⌘	⌘	⌘	⌘	⌘	⌘
b		+	;	K	[	k	{	ï	φ	½	⌘	⌘	⌘	⌘	⌘	⌘
c		,	<	L	\	l	|	î	£	¼	⌘	⌘	⌘	⌘	⌘	⌘
d		-	=	M	]	m	}	ì	¥	;	⌘	⌘	⌘	⌘	⌘	⌘
e		.	>	N	^	n	~	Å	¤	<	⌘	⌘	⌘	⌘	⌘	⌘
f		/	?	O	_	o		À	f	>	⌘	⌘	⌘	⌘	⌘	⌘

CP_737

hex	0	1	2	3	4	5	6	7	8	9	a	b	c	d	e	f
dez	0	16	32	48	64	80	96	112	128	144	160	176	192	208	224	240
0			0	@	P	'	p	A	P	ı	☼	L	⊥	ω	∅	
1		!	1	A	Q	a	q	B	Σ	κ	☼	⊥	⊥	á	±	
2		"	2	B	R	b	r	Γ	T	ñ	☼	⊥	⊥	é	≥	
3		#	3	C	S	c	s	Δ	Υ	μ	|	|	⊥	ñ	≤	
4		\$	4	D	T	d	t	E	Φ	v	†	-	⊥	ÿ	∫	
5		%	5	E	U	e	u	Z	X	ξ	†	†	F	ı	J	
6		&	6	F	V	f	v	H	Ψ	o	⊥	⊥	⊥	ó	÷	
7		'	7	G	W	g	w	θ	Ω	π	⊥	⊥	⊥	ú	≈	
8		(	8	H	X	h	x	I	α	ρ	⊥	⊥	⊥	ü	°	
9		)	9	I	Y	i	y	K	β	σ	⊥	⊥	⊥	ó	£	
a		*	:	J	Z	j	z	Λ	χ	ς	⊥	⊥	⊥	A	.	
b		+	;	K	[	k	{	M	δ	τ	⊥	⊥	■	E	√	
c		,	<	L	\	l	|	N	ε	υ	⊥	⊥	■	H	n	
d		-	=	M	]	m	}	Ξ	ζ	φ	⊥	=	■	I	²	
e		.	>	N	^	n	~	O	η	x	⊥	⊥	■	∅	■	
f		/	?	O	_	o		Π	θ	ψ	⊥	⊥	■	Υ		

CP_850

hex	0	1	2	3	4	5	6	7	8	9	a	b	c	d	e	f
dez	0	16	32	48	64	80	96	112	128	144	160	176	192	208	224	240
0			0	@	P	'	p	Ç	É	Á	☼	L	δ	Ó	-	
1		!	1	A	Q	a	q	ü	æ	í	☼	⊥	⊥	β	±	
2		"	2	B	R	b	r	é	Æ	ó	☼	⊥	⊥	Ê	Ô	=
3		#	3	C	S	c	s	â	ô	ú	|	|	⊥	Ë	Ò	¾
4		\$	4	D	T	d	t	ä	ö	ñ	†	-	⊥	È	õ	¶
5		%	5	E	U	e	u	à	ò	Ñ	Á	†	⊥	ı	Õ	§
6		&	6	F	V	f	v	ã	û	ä	À	ã	⊥	í	μ	÷
7		'	7	G	W	g	w	ç	ù	ó	À	Ã	⊥	î	þ	¿
8		(	8	H	X	h	x	ê	ÿ	¿	©	⊥	⊥	ï	Þ	°
9		)	9	I	Y	i	y	ë	ÿ	©	⊥	⊥	⊥	ú	”	
a		*	:	J	Z	j	z	è	Ü	~	⊥	⊥	⊥	Ů	.	
b		+	;	K	[	k	{	ï	ø	½	⊥	⊥	■	Ù	¹	
c		,	<	L	\	l	|	î	£	¼	⊥	⊥	■	Ý	³	
d		-	=	M	]	m	}	ì	Ø	ı	⊥	=	⊥	Ÿ	²	
e		.	>	N	^	n	~	Å	x	«	⊥	⊥	⊥	ı	—	■
f		/	?	O	_	o		Å	f	»	⊥	⊥	■	'		

CP_851

hex	0	1	2	3	4	5	6	7	8	9	a	b	c	d	e	f
dez	0	16	32	48	64	80	96	112	128	144	160	176	192	208	224	240
0			0	@	P	'	p	Ç	ı	ÿ	☼	Ł	ł	ç	-	
1		!	1	A	Q	a	q	ü	æ	ı	☼	±	ı	ı	±	
2		"	2	B	R	b	r	é	ö	ú	☼	ı	φ	θ	ı	
3		#	3	C	S	c	s	â	ô	û	|	ı	X	ı	φ	
4		\$	4	D	T	d	t	ä	ö	Ä	ı	-	ψ	κ	x	
5		%	5	E	U	e	u	ä	Y	B	K	ı	Q	ı	ı	
6		&	6	F	V	f	v	À	Û	Γ	Λ	Π	α	μ	ψ	
7		'	7	G	W	g	w	ç	ù	Δ	M	P	β	v	ı	
8		(	8	H	X	h	x	ē	Œ	E	N	Ł	ı	ı	"
9		)	9	I	Y	i	y	ë	Ÿ	Z	ı	ı	ı	ı	"
a		*	:	J	Z	j	z	è	Œ	H	ı	ı	ı	ı	ı	
b		+	;	K	[	k	{	ÿ	á	ı	ı	ı	ı	ı	ı
c		,	<	L	\	l	|	ı	ı	ı	ı	ı	ı	ı	ı	
d		-	=	M	]	m	}	E	é	I	ı	=	ı	ı	ı
e		.	>	N	^	n	~	Ä	ı	ı	ı	ı	ı	ı	ı	
f		/	?	O	_	o		H	ı	ı	ı	ı	ı	ı	ı	

CP_852

hex	0	1	2	3	4	5	6	7	8	9	a	b	c	d	e	f
dez	0	16	32	48	64	80	96	112	128	144	160	176	192	208	224	240
0			0	@	P	'	p	Ç	É	á	☼	Ł	ł	ó	-	
1		!	1	A	Q	a	q	ü	ı	ı	☼	±	ı	ı	ı	
2		"	2	B	R	b	r	é	ı	ó	☼	ı	ı	ı	ı	
3		#	3	C	S	c	s	â	ô	ú	|	ı	ı	ı	ı	
4		\$	4	D	T	d	t	ä	ö	Ä	ı	-	ı	ı	ı	
5		%	5	E	U	e	u	ú	ı	ı	ı	ı	ı	ı	ı	
6		&	6	F	V	f	v	ć	ı	ı	ı	ı	ı	ı	ı	
7		'	7	G	W	g	w	ç	ś	ı	ı	ı	ı	ı	ı	
8		(	8	H	X	h	x	ı	ı	ı	ı	ı	ı	ı	ı
9		)	9	I	Y	i	y	ë	Ÿ	ı	ı	ı	ı	ı	ı
a		*	:	J	Z	j	z	ő	Ÿ	ı	ı	ı	ı	ı	ı	
b		+	;	K	[	k	{	ő	ı	ı	ı	ı	ı	ı	ı
c		,	<	L	\	l	|	ı	ı	ı	ı	ı	ı	ı	ı	
d		-	=	M	]	m	}	ı	ı	ı	ı	=	ı	ı	ı
e		.	>	N	^	n	~	Ä	x	ı	ı	ı	ı	ı	ı	
f		/	?	O	_	o		ć	ć	ı	ı	ı	ı	ı	ı	

CP_857

hex	0	1	2	3	4	5	6	7	8	9	a	b	c	d	e	f
dez	0	16	32	48	64	80	96	112	128	144	160	176	192	208	224	240
0				0	@	P	'	p	ç	é	á	☼	Ł	ó	ó	-
1		!	1	A	Q	a	q	ü	æ	í	☼	Ł	Ł	á	ß	±
2		"	2	B	R	b	r	é	Æ	ó	☼	Ł	Ł	É	Ö	
3		#	3	C	S	c	s	ã	õ	ú	|	|	Ł	Ö	¼	
4		\$	4	D	T	d	t	ä	ö	ñ	|	-	Ł	ö	¶	
5		%	5	E	U	e	u	à	ò	ñ	À	†		Ö	§	
6		&	6	F	V	f	v	â	û	ö	À	ã	í	µ	÷	
7		'	7	G	W	g	w	ç	ù	ğ	À	Ã	í		¸	
8		(	8	H	X	h	x	ê	ï	¿	©	Ł	Ł	í	x	°
9		)	9	I	Y	i	y	ë	ö	®	Ł	Ł	Ł	Ú	''	
a		*	:	J	Z	j	z	è	ü	¬	||	Ł	Ł	Ł	0	.
b		+	;	K	[	k	{	ÿ	ø	½	Ł	Ł	☐	Ü	1	
c		,	<	L	\	l	|	î	é	¼	Ł	Ł	☐	í	³	
d		-	=	M	]	m	}	ı	ø	ı	☐	=	ı	ý	²	
e		.	>	N	^	n	~	À	ş	<	¥	Ł	Ł	ı	-	☐
f		/	?	O	_	o		À	ş	>	Ł	Ł	☐	'		

CP_858

hex	0	1	2	3	4	5	6	7	8	9	a	b	c	d	e	f
dez	0	16	32	48	64	80	96	112	128	144	160	176	192	208	224	240
0				0	@	P	'	p	ç	é	á	☼	Ł	ó	ó	-
1		!	1	A	Q	a	q	ü	æ	í	☼	Ł	Ł	D	ß	±
2		"	2	B	R	b	r	é	Æ	ó	☼	Ł	Ł	É	Ö	-
3		#	3	C	S	c	s	ã	õ	ú	|	|	Ł	Ö	¼	
4		\$	4	D	T	d	t	ä	ö	ñ	|	-	Ł	ö	¶	
5		%	5	E	U	e	u	à	ò	ñ	À	†	e	Ö	§	
6		&	6	F	V	f	v	â	û	ö	À	ã	í	µ	÷	
7		'	7	G	W	g	w	ç	ù	ğ	À	Ã	í	p	¸	
8		(	8	H	X	h	x	ê	ÿ	¿	©	Ł	Ł	í	P	°
9		)	9	I	Y	i	y	ë	ö	®	Ł	Ł	Ł	Ú	''	
a		*	:	J	Z	j	z	è	ü	¬	||	Ł	Ł	Ł	0	.
b		+	;	K	[	k	{	ÿ	ø	½	Ł	Ł	☐	Ü	1	
c		,	<	L	\	l	|	î	é	¼	Ł	Ł	☐	ý	³	
d		-	=	M	]	m	}	ı	ø	ı	☐	=	ı	Y	²	
e		.	>	N	^	n	~	À	x	<	¥	Ł	Ł	ı	-	☐
f		/	?	O	_	o		À	f	>	Ł	Ł	☐	'		

CP_860

hex	0	1	2	3	4	5	6	7	8	9	a	b	c	d	e	f
dez	0	16	32	48	64	80	96	112	128	144	160	176	192	208	224	240
0			0	@	P	'	p	Ç	É	á	☼	ℓ	μ	α	≡	
1		!	1	A	Q	a	q	ü	À	í	☼	±	⸮	β	±	
2		"	2	B	R	b	r	é	È	ó	☼	⸮	π	Γ	≥	
3		#	3	C	S	c	s	â	ô	ú	|	†	μ	π	≤	
4		\$	4	D	T	d	t	ã	õ	ñ	†	—	⸮	Σ	|	
5		%	5	E	U	e	u	à	ò	Ñ	‡	†	ƒ	σ	∫	
6		&	6	F	V	f	v	Á	Ó	æ	‡	†	π	μ	÷	
7		'	7	G	W	g	w	ç	ù	œ	π	‡	‡	τ	≈	
8		(	8	H	X	h	x	ê	ì	¿	‡	ℓ	‡	Φ	°	
9		)	9	I	Y	i	y	Ê	Ï	Ò	‡	⸮	∫	θ	.	
a		*	:	J	Z	j	z	è	Û	¬	‡	μ	∫	Ω	.	
b		+	;	K	[	k	{	í	φ	½	‡	⸮	■	δ	√	
c		,	<	L	\	l	|	ò	£	¼	‡	‡	■	∞	n	
d		-	=	M	]	m	}	ì	Ù	;	‡	=	■	∅	²	
e		.	>	N	^	n	~	Ã	ℜ	<	‡	‡	■	ε	■	
f		/	?	O	_	o		Â	Ó	>	‡	±	■	∅		

CP_861

hex	0	1	2	3	4	5	6	7	8	9	a	b	c	d	e	f
dez	0	16	32	48	64	80	96	112	128	144	160	176	192	208	224	240
0			0	@	P	'	p	Ç	É	á	☼	ℓ	μ	α	≡	
1		!	1	A	Q	a	q	ü	æ	í	☼	±	⸮	β	±	
2		"	2	B	R	b	r	é	Æ	ó	☼	⸮	π	Γ	≥	
3		#	3	C	S	c	s	â	ô	ú	|	†	μ	π	≤	
4		\$	4	D	T	d	t	ä	ö	Á	†	—	⸮	Σ	|	
5		%	5	E	U	e	u	à	þ	í	‡	†	ƒ	σ	∫	
6		&	6	F	V	f	v	ã	û	Ó	‡	†	π	μ	÷	
7		'	7	G	W	g	w	ç	Ý	Ú	π	‡	‡	τ	≈	
8		(	8	H	X	h	x	ê	ý	¿	‡	ℓ	‡	Φ	°	
9		)	9	I	Y	i	y	Ê	Ï	Ò	‡	⸮	∫	θ	.	
a		*	:	J	Z	j	z	è	Û	¬	‡	μ	∫	Ω	.	
b		+	;	K	[	k	{	Đ	ø	½	‡	⸮	■	δ	√	
c		,	<	L	\	l	|	ð	£	¼	‡	‡	■	∞	n	
d		-	=	M	]	m	}	Þ	Ø	;	‡	=	■	∅	²	
e		.	>	N	^	n	~	Ã	ℜ	<	‡	‡	■	ε	■	
f		/	?	O	_	o		Â	Ó	>	‡	±	■	∅		

CP_863

hex	0	1	2	3	4	5	6	7	8	9	a	b	c	d	e	f
dez	0	16	32	48	64	80	96	112	128	144	160	176	192	208	224	240
0			0	@	P	'	p	Ç	É	!	☼	⊥	⊥	⊥	α	≡
1		!	1	A	Q	a	q	ü	È	'	☼	⊥	⊥	⊥	β	±
2		"	2	B	R	b	r	é	Ê	ó	☼	⊥	⊥	⊥	Γ	≥
3		#	3	C	S	c	s	â	ô	ú	|	|	|	|	π	≤
4		\$	4	D	T	d	t	À	Ë	"	|	-	-	⊥	Σ	∫
5		%	5	E	U	e	u	à	ï	¸	|	|	|	⊥	σ	∫
6		&	6	F	V	f	v	¶	û	³	|	|	|	⊥	μ	+
7		'	7	G	W	g	w	ç	ù	-	|	|	|	|	τ	≈
8		(	8	H	X	h	x	ê	ı	ı	|	|	|	|	Φ	°
9		)	9	I	Y	i	y	ë	ô	¸	|	|	|	|	θ	.
a		*	:	J	Z	j	z	è	ü	-	|	|	|	|	Ω	.
b		+	;	K	[	k	{	ı	φ	½	|	|	|	■	δ	∫
c		,	<	L	\	l	|	ı	£	¼	|	|	|	■	∞	n
d		-	=	M	]	m	}	-	ò	¾	|	|	|	■	∅	²
e		.	>	N	^	n	~	À	Û	«	|	|	|	|	€	■
f		/	?	O	_	o		§	f	»	|	|	|	■	n	

CP_864

hex	0	1	2	3	4	5	6	7	8	9	a	b	c	d	e	f
dez	0	16	32	48	64	80	96	112	128	144	160	176	192	208	224	240
0			0	@	P	'	p	g	β		.	⊥	⊥	⊥	-	≡
1		!	1	A	Q	a	q	.	∞	-	|	⊥	⊥	⊥	⊥	"
2		"	2	B	R	b	r	.	φ	⊥	|	|	|	|	⊥	∫
3		#	3	C	S	c	s	√	±	£	|	|	|	|	⊥	∫
4		\$	4	D	T	d	t	☼	½	ı	|	|	|	|	⊥	∫
5		%	5	E	U	e	u	-	±	⊥	|	|	|	|	⊥	∫
6		&	6	F	V	f	v	|	≈		|	|	|	|	⊥	∫
7		'	7	G	W	g	w	†	«		|	|	|	|	⊥	∫
8		(	8	H	X	h	x	†	»	|	|	|	|	|	⊥	∫
9		)	9	I	Y	i	y	†	»	|	|	|	|	|	⊥	∫
a		*	:	J	Z	j	z	†	»	|	|	|	|	|	⊥	∫
b		+	;	K	[	k	{	⊥		|	|	|	|	|	⊥	∫
c		,	<	L	\	l	|	|	|	.	|	|	|	|	⊥	∫
d		-	=	M	]	m	}	|	√	∅	|	|	|	|	⊥	∫
e		.	>	N	^	n	~	|	√	∅	|	|	|	|	⊥	∫
f		/	?	O	_	o		|	√	∅	|	|	|	|	⊥	∫

Extended_864

hex	0	1	2	3	4	5	6	7	8	9	a	b	c	d	e	f
dez	0	16	32	48	64	80	96	112	128	144	160	176	192	208	224	240
0			0	@	P	'	p	°	ª		·	µ	>	—	≡	
1		!	1	A	Q	a	q	¼	½	—	ı	ı	ı	ı	ı	ı
2		"	2	B	R	b	r	¾	ı	ı	ı	ı	ı	ı	ı	ı
3		#	3	C	S	c	s	ı	ı	ı	ı	ı	ı	ı	ı	ı
4		\$	4	D	T	d	t	ı	ı	ı	ı	ı	ı	ı	ı	ı
5		%	5	E	U	e	u	ı	ı	ı	ı	ı	ı	ı	ı	ı
6		&	6	F	V	f	v	ı	ı	ı	ı	ı	ı	ı	ı	ı
7		'	7	G	W	g	w	ı	ı	ı	ı	ı	ı	ı	ı	ı
8		(	8	H	X	h	x	ı	ı	ı	ı	ı	ı	ı	ı	ı
9		)	9	I	Y	i	y	ı	ı	ı	ı	ı	ı	ı	ı	ı
a		*	:	J	Z	j	z	ı	ı	ı	ı	ı	ı	ı	ı	ı
b		+	;	K	[	k	{	ı	ı	ı	ı	ı	ı	ı	ı	ı
c		,	<	L	\	l	|	ı	ı	ı	ı	ı	ı	ı	ı	ı
d		-	=	M	]	m	}	ı	ı	ı	ı	ı	ı	ı	ı	ı
e		.	>	N	^	n	~	ı	ı	ı	ı	ı	ı	ı	ı	ı
f		/	?	O	_	o		ı	ı	ı	ı	ı	ı	ı	ı	ı

CP_865

hex	0	1	2	3	4	5	6	7	8	9	a	b	c	d	e	f
dez	0	16	32	48	64	80	96	112	128	144	160	176	192	208	224	240
0			0	@	P	'	p	Ç	É	á	ı	ı	ı	ı	a	≡
1		!	1	A	Q	a	q	ü	æ	í	ı	ı	ı	ı	β	±
2		"	2	B	R	b	r	é	Æ	ó	ı	ı	ı	ı	Γ	≥
3		#	3	C	S	c	s	â	ô	ú	ı	ı	ı	ı	π	≤
4		\$	4	D	T	d	t	ä	ö	ñ	ı	ı	ı	ı	Σ	∫
5		%	5	E	U	e	u	à	ò	Ñ	ı	ı	ı	ı	σ	∫
6		&	6	F	V	f	v	å	û	æ	ı	ı	ı	ı	μ	÷
7		'	7	G	W	g	w	ç	ù	ó	ı	ı	ı	ı	τ	≈
8		(	8	H	X	h	x	ê	ÿ	ı	ı	ı	ı	ı	Φ	°
9		)	9	I	Y	i	y	ë	Ö	ı	ı	ı	ı	ı	θ	·
a		*	:	J	Z	j	z	è	Ü	ı	ı	ı	ı	ı	Ω	·
b		+	;	K	[	k	{	ï	ø	ı	ı	ı	ı	ı	δ	√
c		,	<	L	\	l	|	î	£	ı	ı	ı	ı	ı	ø	n
d		-	=	M	]	m	}	ì	Ø	ı	ı	ı	ı	ı	ø	z
e		.	>	N	^	n	~	Ë	℞	ı	ı	ı	ı	ı	e	■
f		/	?	O	_	o		À	f	ı	ı	ı	ı	ı	n	

CP_866

hex	0	1	2	3	4	5	6	7	8	9	a	b	c	d	e	f
dez	0	16	32	48	64	80	96	112	128	144	160	176	192	208	224	240
0			0	@	P	'	p	A	P	a	⊗	⊥	⊥	ρ	Ë	
1		!	1	A	Q	a	q	Б	С	б	⊗	⊥	⊥	с	ë	
2		"	2	B	R	b	r	В	Т	в	⊗	⊥	⊥	т	ё	
3		#	3	C	S	c	s	Г	У	г	|	|	|	у	е	
4		\$	4	D	T	d	t	Д	Ф	д	|	-	⊥	Ф	ï	
5		%	5	E	U	e	u	Е	Х	е	⊥	⊥	⊥	х	ÿ	
6		&	6	F	V	f	v	Ж	Ц	ж	⊥	⊥	⊥	ц	ÿ	
7		'	7	G	W	g	w	З	Ч	з	⊥	⊥	⊥	ч	ÿ	
8		(	8	H	X	h	x	И	Ш	и	⊥	⊥	⊥	ш	"	
9		)	9	I	Y	i	y	Й	Щ	й	⊥	⊥	⊥	щ	•	
a		*	:	J	Z	j	z	К	Ъ	к	⊥	⊥	⊥	ъ	.	
b		+	;	K	[	k	[	Л	Ы	л	⊥	⊥	⊥	ы	√	
c		,	<	L	\	l	!	М	Ь	м	⊥	⊥	⊥	ь	№	
d		-	=	M	]	m	]	Н	Э	н	⊥	=	⊥	э	□	
e		.	>	N	^	n	~	О	Ю	о	⊥	⊥	⊥	ю	■	
f		/	?	O	_	o		П	Я	п	⊥	⊥	⊥	я		

Bulgaria_866

hex	0	1	2	3	4	5	6	7	8	9	a	b	c	d	e	f
dez	0	16	32	48	64	80	96	112	128	144	160	176	192	208	224	240
0			0	@	P	'	p	A	P	a	p	⊥	⊗	α	≡	
1		!	1	A	Q	a	q	Б	С	б	с	⊥	⊗	β	±	
2		"	2	B	R	b	r	В	Т	в	т	⊥	⊗	Γ	≥	
3		#	3	C	S	c	s	Г	У	г	у	|	|	π	≤	
4		\$	4	D	T	d	t	Д	Ф	д	Ф	-	|	Σ	∫	
5		%	5	E	U	e	u	Е	Х	е	х	⊥	№	σ	∫	
6		&	6	F	V	f	v	Ж	Ц	ж	ц	⊥	⊥	μ	÷	
7		'	7	G	W	g	w	З	Ч	з	ч	⊥	⊥	τ	≈	
8		(	8	H	X	h	x	И	Ш	и	ш	⊥	⊥	φ	"	
9		)	9	I	Y	i	y	Й	Щ	й	щ	⊥	⊥	θ	•	
a		*	:	J	Z	j	z	К	Ъ	к	ъ	⊥	⊥	Ω	.	
b		+	;	K	[	k	[	Л	Ы	л	ы	⊥	⊥	δ	√	
c		,	<	L	\	l	!	М	Ь	м	ь	⊥	⊥	ω	π	
d		-	=	M	]	m	]	Н	Э	н	э	=	⊥	∅	²	
e		.	>	N	^	n	~	О	Ю	о	ю	⊥	⊥	ε	■	
f		/	?	O	_	o		П	Я	п	я	⊥	⊥	∩		

CP_1250

hex	0	1	2	3	4	5	6	7	8	9	a	b	c	d	e	f
dez	0	16	32	48	64	80	96	112	128	144	160	176	192	208	224	240
0			0	@	P	'	p	€			°	Ř	Đ	ř	đ	
1		!	1	A	Q	a	q		'	˘	±	Á	Ñ	á	ñ	
2		"	2	B	R	b	r	,	'	˘	˘	Ā	Ń	ā	ń	
3		#	3	C	S	c	s		'	˘	˘	Ǻ	Ó	ǻ	ó	
4		\$	4	D	T	d	t	„	'	˘	˘	Ǻ	Ö	ǻ	ö	
5		%	5	E	U	e	u	„	'	˘	˘	Λ	μ	Ł	Ń	ł
6		&	6	F	V	f	v	†	-	!	¶	Ć	Ů	ć	ů	
7		'	7	G	W	g	w	‡	-	§	•	Ÿ	×	ç	÷	
8		(	8	H	X	h	x			˘	˘	Č	Ř	č	ř	
9		)	9	I	Y	i	y	‰	™	©	ą	É	Ō	é	ő	
a		*	:	J	Z	j	z	Š	š	§	§	Ę	Ó	ę	ú	
b		+	;	K	[	k	{	<	>	«	»	Ë	Ů	ë	ů	
c		,	<	L	\	l	|	š	ś	˘	˘	Ĺ	Ě	ů	ě	ű
d		-	=	M	]	m	}	†	€	-	˘	ı	Ÿ	ı	ý	
e		.	>	N	^	n	˘	ž	ž	©	ı	ı	ı	ı	ı	
f		/	?	O	_	o		ž	ž	ž	ž	Đ	Đ	đ	·	

CP_1251

hex	0	1	2	3	4	5	6	7	8	9	a	b	c	d	e	f
dez	0	16	32	48	64	80	96	112	128	144	160	176	192	208	224	240
0			0	@	P	'	p	ñ	ñ		°	A	P	a	p	
1		!	1	A	Q	a	q	Г	'	Ÿ	±	Б	С	б	с	
2		"	2	B	R	b	r	,	'	Ÿ	ı	В	Т	в	т	
3		#	3	C	S	c	s	г	'	ı	ı	Г	У	г	у	
4		\$	4	D	T	d	t	„	'	˘	˘	Г	Ф	д	ф	
5		%	5	E	U	e	u	„	'	˘	˘	Г	μ	Е	Х	е
6		&	6	F	V	f	v	†	-	!	¶	Ж	Ц	ж	ц	
7		'	7	G	W	g	w	‡	-	§	•	З	Ч	э	ч	
8		(	8	H	X	h	x	€		Ë	ë	И	Ш	и	ш	
9		)	9	I	Y	i	y	‰	™	©	№	Й	Щ	й	щ	
a		*	:	J	Z	j	z	Ь	ь	Е	е	К	Ъ	к	ъ	
b		+	;	K	[	k	{	<	>	«	»	Л	Ы	л	ы	
c		,	<	L	\	l	|	Ь	ь	˘	˘	М	Ь	м	ь	
d		-	=	M	]	m	}	К	ќ	-	˘	С	Н	Э	н	э
e		.	>	N	^	n	˘	ћ	ћ	©	˘	О	Ю	о	ю	
f		/	?	O	_	o		Ц	ц	ı	ı	П	Я	п	я	

CP_1252

hex	0	1	2	3	4	5	6	7	8	9	a	b	c	d	e	f
dez	0	16	32	48	64	80	96	112	128	144	160	176	192	208	224	240
0			0	@	P	'	p	€				°	À	Ð	à	ð
1		!	1	A	Q	a	q		`	;	±	Á	Ñ	á	ñ	
2		"	2	B	R	b	r	,	'	¢	²	Â	Ò	â	ò	
3		#	3	C	S	c	s	f	ˆ	£	³	Ã	Ó	ã	ó	
4		\$	4	D	T	d	t	,	ˆ	¤	´	Ä	Ö	ä	ö	
5		%	5	E	U	e	u	-	•	¥	µ	Å	Ø	å	ø	
6		&	6	F	V	f	v	†	-	¦	¶	Æ	Ö	æ	ö	
7		'	7	G	W	g	w	‡	-	§	•	Ç	×	ç	÷	
8		(	8	H	X	h	x	ˆ	ˆ	¨	ˆ	È	Ø	è	ø	
9		)	9	I	Y	i	y	‰	™	©	ˆ	É	Ù	é	ù	
a		*	:	J	Z	j	z	Š	š	ª	º	Ê	Ú	ê	ú	
b		+	;	K	[	k	{	<	>	«	»	Ë	Û	ë	û	
c		,	<	L	\	l	|	œ	œ	ˆ	‡	Ì	Ü	ì	ü	
d		-	=	M	]	m	}			-	‡	Í	Ý	í	ý	
e		.	>	N	^	n	˜			®	‡	Î	Þ	î	þ	
f		/	?	O	_	o			ÿ	-	¿	Ï	ß	ï	ÿ	

CP_1253

hex	0	1	2	3	4	5	6	7	8	9	a	b	c	d	e	f
dez	0	16	32	48	64	80	96	112	128	144	160	176	192	208	224	240
0			0	@	P	'	p	€				°	Τ	Π	ϖ	π
1		!	1	A	Q	a	q		'	ˆ	±	Α	Ρ	α	ρ	
2		"	2	B	R	b	r	,	'	Α	²	Β		Β	Ϸ	
3		#	3	C	S	c	s	f	ˆ	£	³	Γ	Σ	χ	σ	
4		\$	4	D	T	d	t	,	ˆ	¤	´	Δ	Τ	δ	τ	
5		%	5	E	U	e	u	-	•	¥	µ	Ε	Υ	ε	υ	
6		&	6	F	V	f	v	†	-	¦	¶	Ζ	Φ	ζ	φ	
7		'	7	G	W	g	w	‡	-	§	•	Η	Χ	η	χ	
8		(	8	H	X	h	x			¨	ˆ	Ε	Θ	Ϸ	θ	ψ
9		)	9	I	Y	i	y	‰	™	©	ˆ	Η	Ι	ι	ω	
a		*	:	J	Z	j	z			ˆ	ˆ	Ι	Κ	ι	κ	ν
b		+	;	K	[	k	{	<	>	«	»	Λ	Υ	λ	υ	
c		,	<	L	\	l	|			ˆ	ˆ	Ο	Μ	ο	μ	ό
d		-	=	M	]	m	}			-	‡	Ν	Ε	ν	υ	
e		.	>	N	^	n	˜			®	ˆ	Υ	Ξ	ν	ξ	ώ
f		/	?	O	_	o				-	ˆ	Ω	Ο	ι	ο	

CP_1254

hex	0	1	2	3	4	5	6	7	8	9	a	b	c	d	e	f
dez	0	16	32	48	64	80	96	112	128	144	160	176	192	208	224	240
0			0	@	P	'	p	e			°	À	ä	ã	õ	
1		!	1	A	Q	a	q		'	;	±	Á	Ñ	á	ñ	
2		"	2	B	R	b	r	,	'	¢	²	Â	Ò	â	ò	
3		#	3	C	S	c	s	f	"	£	³	Ã	Ó	ã	ó	
4		\$	4	D	T	d	t	„	"	¤	´	Ä	Ô	ä	ô	
5		%	5	E	U	e	u	_	•	¥	µ	Å	Õ	å	õ	
6		&	6	F	V	f	v	†	-	¦	¶	Æ	Ö	æ	ö	
7		'	7	G	W	g	w	‡	-	§	·	Ç	×	ç	÷	
8		(	8	H	X	h	x	ˆ	˜	¨	¸	È	Ø	è	ø	
9		)	9	I	Y	i	y	‰	™	©	¹	É	Ù	é	ù	
a	*	:	J	Z	j	z	š	š	à	ò	é	Ú	Ê	Ú	ê	ú
b	+	;	K	[	k	{	<	>	«	»	Ë	Ó	ë	û		
c	,	<	L	\	l	|	œ	œ	ˆ	‡	Ï	Û	ï	ü		
d	-	=	M	]	m	}			-	¼	Í	Ý	í	ý		
e	.	>	N	^	n	~			@	½	Î	Ş	î	ş		
f	/	?	O	_	o				Ƴ	—	ı	İ	ß	ı	ÿ	

8859_1

hex	0	1	2	3	4	5	6	7	8	9	a	b	c	d	e	f
dez	0	16	32	48	64	80	96	112	128	144	160	176	192	208	224	240
0			0	@	P	'	p	Ç	É		°	À	Ð	à	ð	
1		!	1	A	Q	a	q	Û	æ	ı	±	Á	Ñ	á	ñ	
2		"	2	B	R	b	r	é	Æ	¢	²	Â	Ò	â	ò	
3		#	3	C	S	c	s	ã	õ	£	³	Ã	Ó	ã	ó	
4		\$	4	D	T	d	t	ä	ö	¤	´	Ä	Ô	ä	ô	
5		%	5	E	U	e	u	à	ò	¥	µ	Å	Õ	å	õ	
6		&	6	F	V	f	v	ã	ü	¦	¶	Æ	Ö	æ	ö	
7		'	7	G	W	g	w	ç	ù	§	·	Ç	×	ç	÷	
8		(	8	H	X	h	x	ê	ÿ	¨	¸	È	Ø	è	ø	
9		)	9	I	Y	i	y	ë	ÿ	©	¹	É	Ù	é	ù	
a	*	:	J	Z	j	z	è	Û	à	ò	é	Ú	Ê	Ú	ê	ú
b	+	;	K	[	k	{	ı	¢	«	»	Ë	Ó	ë	û		
c	,	<	L	\	l	|	ı	£	ˆ	‡	Ï	Û	ı	ü		
d	-	=	M	]	m	}	ı	¥	-	¼	Í	Ý	ı	ÿ		
e	.	>	N	^	n	~	À	Æ	@	½	Î	Ş	ı	þ		
f	/	?	O	_	o		À	f	-	ı	İ	ß	ı	ÿ		

8859_1SAP

hex	0	1	2	3	4	5	6	7	8	9	a	b	c	d	e	f
dez	0	16	32	48	64	80	96	112	128	144	160	176	192	208	224	240
0			0	@	P	'	p	Ç	†		*	À	Ð	à	ð	
1		!	1	A	Q	a	q	ü	—	i	±	Á	Ñ	á	ñ	
2		"	2	B	R	b	r	é	|	¢	²	Â	Ò	â	ò	
3		#	3	C	S	c	s	â	¡	£	³	Ã	Ó	ã	ó	
4		\$	4	D	T	d	t	ä	¡	¤	´	Ä	Ô	ä	ô	
5		%	5	E	U	e	u	à	¡	¥	µ	Å	Õ	å	õ	
6		&	6	F	V	f	v	ã	¡	¦	¶	Æ	Ö	æ	ö	
7		'	7	G	W	g	w	ç	¡	§	·	Ç	×	ç	÷	
8		(	8	H	X	h	x	ê	¡	¨	¸	È	Ø	è	ø	
9		)	9	I	Y	i	y	ë	¡	©	¹	É	Ù	é	ù	
a		*	:	J	Z	j	z	è	¡	ª	º	Ê	Ú	ê	ú	
b		+	;	K	[	k	{	ï		«	»	Ë	Û	ë	û	
c		,	<	L	\	l	|	î		¬	¼	Ì	Ü	ì	ü	
d		-	=	M	]	m	}	í		-	½	Í	Ý	í	ý	
e		.	>	N	^	n	~	À		®	¾	Î	Þ	î	þ	
f		/	?	O	_	o		Å		—	¿	Ï	ß	ï	ÿ	

8859_2

hex	0	1	2	3	4	5	6	7	8	9	a	b	c	d	e	f
dez	0	16	32	48	64	80	96	112	128	144	160	176	192	208	224	240
0			0	@	P	'	p	Ç	É		°	Ř	Ð	ý	đ	
1		!	1	A	Q	a	q	ü	æ	À	á	Á	Ñ	á	ñ	
2		"	2	B	R	b	r	é	Æ	˘	˙	Â	Ň	â	ň	
3		#	3	C	S	c	s	â	õ	Ł	ł	Ã	Ó	ã	ó	
4		\$	4	D	T	d	t	ä	ö	Ǫ	’	Ä	Ö	ä	ö	
5		%	5	E	U	e	u	à	ò	Ł	ł	Ĺ	Ő	í	ő	
6		&	6	F	V	f	v	ã	û	Ś	ś	Ć	Ů	ć	ů	
7		'	7	G	W	g	w	ç	ù	Ş	˘	Ç	×	ç	÷	
8		(	8	H	X	h	x	ê	ÿ	˘	˙	Č	Ř	č	ř	
9		)	9	I	Y	i	y	ë	ÿ	Š	š	É	Ů	é	ů	
a		*	:	J	Z	j	z	è	Û	Ş	ş	Ę	Ú	ę	ú	
b		+	;	K	[	k	{	ï	ϕ	†	‡	Ě	Ů	ě	ů	
c		,	<	L	\	l	|	î	£	Ž	ž	Ě	Ů	ě	ů	
d		-	=	M	]	m	}	í	¥	-	˘	Í	Ý	í	ý	
e		.	>	N	^	n	~	À	Pl	Ž	ž	İ	Ť	ı	ť	
f		/	?	O	_	o		Å	f	Ž	ž	Đ	ß	đ	·	

8859_5

hex	0	1	2	3	4	5	6	7	8	9	a	b	c	d	e	f
dez	0	16	32	48	64	80	96	112	128	144	160	176	192	208	224	240
0			0	@	P	'	p	ç	É		A	P	a	p	№	
1		!	1	A	Q	a	q	ü	æ	Ë	Б	С	б	с	ё	
2		"	2	B	R	b	r	é	Æ	ñ	В	Т	в	т	ñ	
3		#	3	C	S	c	s	ā	ō	ƒ	Г	У	г	у	ƒ	
4		\$	4	D	T	d	t	ä	ö	€	Д	Ф	д	ф	€	
5		%	5	E	U	e	u	ā	ō	ƒ	Е	Х	е	х	ƒ	
6		&	6	F	V	f	v	ā	ū	ı	Ж	Ц	ж	ц	ı	
7		'	7	G	W	g	w	ç	ū	ı	З	Ч	з	ч	ı	
8		(	8	H	X	h	x	ē	ÿ	ı	И	Ш	и	ш	ı	
9		)	9	I	Y	i	y	ë	ÿ	ı	Й	Щ	й	щ	ı	
a		*	:	J	Z	j	z	è	Ū	ı	К	Ъ	к	ъ	ı	
b		+	;	K	[	k	[	ı	ƒ	ñ	Л	Ы	л	ы	ñ	
c		,	<	L	\	l	|	ı	€	ƒ	М	Ь	м	ь	ƒ	
d		-	=	M	]	m	]	ı	¥	-	Н	Э	н	э	ƒ	
e		.	>	N	^	n	~	ˆ	ƒ	ı	О	Ю	о	ю	ı	
f		/	?	O	_	o		ˆ	ƒ	ı	П	Я	п	я	ı	

8859_7

hex	0	1	2	3	4	5	6	7	8	9	a	b	c	d	e	f
dez	0	16	32	48	64	80	96	112	128	144	160	176	192	208	224	240
0			0	@	P	'	p	ç	É		°	ı	П	ū	π	
1		!	1	A	Q	a	q	ü	æ	'	±	A	P	a	p	
2		"	2	B	R	b	r	é	Æ	'	²	В		β	ƒ	
3		#	3	C	S	c	s	ā	ō	ƒ	³	Г	Σ	χ	σ	
4		\$	4	D	T	d	t	ä	ö		'	Δ	Т	δ	τ	
5		%	5	E	U	e	u	ā	ō		»	Е	Υ	ε	υ	
6		&	6	F	V	f	v	ā	ū	ı	!	A	Z	φ	ζ	φ
7		'	7	G	W	g	w	ç	ū	ı	§	•	Н	Х	η	х
8		(	8	H	X	h	x	ē	ÿ	"	€	θ	Ψ	θ	ψ	
9		)	9	I	Y	i	y	ë	ÿ	©	Н	Ι	Ω	ι	ω	
a		*	:	J	Z	j	z	è	Ū		ı	К	İ	κ	ı	
b		+	;	K	[	k	[	ı	ƒ	«	»	Λ	Υ	λ	ū	
c		,	<	L	\	l	|	ı	€	ı	ı	Ο	М	ά	μ	ó
d		-	=	M	]	m	]	ı	¥	-	½	N	É	ν	ú	
e		.	>	N	^	n	~	ˆ	ƒ	ı	Υ	Ξ	ή	ξ	ώ	
f		/	?	O	_	o		ˆ	ƒ	ı	Ω	Ο	ı	ο		

8859_9

hex	0	1	2	3	4	5	6	7	8	9	a	b	c	d	e	f
dez	0	16	32	48	64	80	96	112	128	144	160	176	192	208	224	240
0			0	@	P	'	p	ç	é		°	À	Ǿ	à	ǿ	
1		!	1	A	Q	a	q	ü	æ	;	±	Á	Ñ	á	ñ	
2		"	2	B	R	b	r	é	Æ	¢	²	Â	Ò	â	ò	
3		#	3	C	S	c	s	â	ô	£	³	Ã	Ó	ã	ó	
4		\$	4	D	T	d	t	ä	ö	¤	´	Ä	Ô	ä	ö	
5		%	5	E	U	e	u	à	ò	¥	µ	Å	Õ	å	õ	
6		&	6	F	V	f	v	â	û	¦	¶	Æ	Ö	æ	ö	
7		'	7	G	W	g	w	ç	ù	§	·	Ç	×	ç	÷	
8		(	8	H	X	h	x	ê	ÿ	¨	¸	È	Ø	è	ø	
9		)	9	I	Y	i	y	ë	ÿ	©	¹	É	Ù	é	ù	
a		*	:	J	Z	j	z	è	Û	ª	º	Ê	Ú	ê	ú	
b		+	;	K	[	k	{	ÿ	¢	«	»	Ë	Û	ë	û	
c		,	<	L	\	l	|	î	£	¬	¼	Ì	Ü	ì	ü	
d		-	=	M	]	m	}	ï	¥	-	½	Í	Ý	í	ý	
e		.	>	N	^	n	~	Ë	¤	©	¾	Î	Þ	î	þ	
f		/	?	O	_	o		À	f	-	¿	Ï	ß	ï	ÿ	

8859_15

hex	0	1	2	3	4	5	6	7	8	9	a	b	c	d	e	f
dez	0	16	32	48	64	80	96	112	128	144	160	176	192	208	224	240
0			0	@	P	'	p	ç	é		°	À	Ð	à	ð	
1		!	1	A	Q	a	q	ü	æ	;	±	Á	Ñ	á	ñ	
2		"	2	B	R	b	r	é	Æ	¢	²	Â	Ò	â	ò	
3		#	3	C	S	c	s	â	ô	£	³	Ã	Ó	ã	ó	
4		\$	4	D	T	d	t	ä	ö	¤	´	Ä	Ô	ä	ö	
5		%	5	E	U	e	u	à	ò	¥	µ	Å	Õ	å	õ	
6		&	6	F	V	f	v	â	û	¦	¶	Æ	Ö	æ	ö	
7		'	7	G	W	g	w	ç	ù	§	·	Ç	×	ç	÷	
8		(	8	H	X	h	x	ê	ÿ	¨	¸	È	Ø	è	ø	
9		)	9	I	Y	i	y	ë	ÿ	©	¹	É	Ù	é	ù	
a		*	:	J	Z	j	z	è	Û	ª	º	Ê	Ú	ê	ú	
b		+	;	K	[	k	{	ï	¢	«	»	Ë	Û	ë	û	
c		,	<	L	\	l	|	î	£	¬	¼	Ì	Ü	ì	ü	
d		-	=	M	]	m	}	ï	¥	-	½	Í	Ý	í	ý	
e		.	>	N	^	n	~	Ë	¤	©	¾	Î	Þ	î	þ	
f		/	?	O	_	o		À	f	-	¿	Ï	ß	ï	ÿ	

BRASCII

hex	0	1	2	3	4	5	6	7	8	9	a	b	c	d	e	f
dez	0	16	32	48	64	80	96	112	128	144	160	176	192	208	224	240
0			0	@	P	'	p					°	À	Ð	à	ð
1			!	1	A	Q	a	q			ı	±	Á	Ñ	á	ñ
2			"	2	B	R	b	r			¢	²	Â	Ò	â	ò
3			#	3	C	S	c	s			£	³	Ã	Ó	ã	ó
4			\$	4	D	T	d	t			¤	´	Ä	Ô	ä	ô
5			%	5	E	U	e	u			¥	µ	Å	Õ	å	õ
6			&	6	F	V	f	v			¦	¶	Æ	Ö	æ	ö
7			'	7	G	W	g	w			§	•	Ç	Ø	ç	œ
8			(	8	H	X	h	x			¨	¸	È	Ø	è	ø
9			)	9	I	Y	i	y			©	¹	É	Ù	é	ù
a			*	:	J	Z	j	z			ª	º	Ê	Ú	ê	ú
b			+	;	K	[	k	{			«	»	Ë	Û	ë	û
c			,	<	L	\	l	|			¬	¼	Ì	Ü	ì	ü
d			-	=	M	]	m	}			-	½	Í	Ý	í	ý
e			.	>	N	^	n	~			®	¾	Î	Þ	î	þ
f			/	?	O	_	o				¯	¿	Ï	ß	ï	ÿ

Abicomp

hex	0	1	2	3	4	5	6	7	8	9	a	b	c	d	e	f
dez	0	16	32	48	64	80	96	112	128	144	160	176	192	208	224	240
0			0	@	P	'	p					ò	ı	ò		
1			!	1	A	Q	a	q			À	Ó	à	ó		
2			"	2	B	R	b	r			Á	Ò	á	ò		
3			#	3	C	S	c	s			Â	Õ	â	õ		
4			\$	4	D	T	d	t			Ã	Ö	ã	ö		
5			%	5	E	U	e	u			Ä	Ø	ä	œ		
6			&	6	F	V	f	v			Ç	Ù	ç	ù		
7			'	7	G	W	g	w			È	Ú	è	ú		
8			(	8	H	X	h	x			É	Û	é	û		
9			)	9	I	Y	i	y			Ê	Ü	ê	ü		
a			*	:	J	Z	j	z			Ë	Ý	ë	ÿ		
b			+	;	K	[	k	{			Ì	”	ì	ß		
c			,	<	L	\	l	|			Í	£	í	ª		
d			-	=	M	]	m	}			Î	•	î	º		
e			.	>	N	^	n	~			Ï	§	ï	¿		
f			/	?	O	_	o				Ñ	°	ñ	±		

Roman 8

hex	0	1	2	3	4	5	6	7	8	9	a	b	c	d	e	f
dez	0	16	32	48	64	80	96	112	128	144	160	176	192	208	224	240
0			0	@	P	'	p					—	â	À	Á	þ
1		!	1	A	Q	a	q				À	Ý	ê	î	Ã	Þ
2		"	2	B	R	b	r				Â	ý	ô	Ø	ã	·
3		#	3	C	S	c	s				È	°	û	Æ	Ð	µ
4		\$	4	D	T	d	t				Ê	Ç	á	â	ð	¶
5		%	5	E	U	e	u				Ë	ç	é	í	í	¾
6		&	6	F	V	f	v				Ï	Ñ	ó	ø	ì	—
7		'	7	G	W	g	w				Ī	ñ	ú	æ	Ó	¼
8		(	8	H	X	h	x				'	;	à	Å	Ò	½
9		)	9	I	Y	i	y				'	;	è	ì	Õ	¾
a		*	:	J	Z	j	z				^	¤	ò	Ö	ö	º
b		+	;	K	[	k	{				"	£	ù	Û	š	«
c		,	<	L	\	l	|				~	¥	ä	É	š	■
d		-	=	M	]	m	}				Û	§	ë	ï	Ú	»
e		.	>	N	^	n	~				Û	f	ö	ß	Ý	±
f		/	?	O	_	o					£	¢	ü	Ô	ÿ	

CoaxTwinax

hex	0	1	2	3	4	5	6	7	8	9	a	b	c	d	e	f
dez	0	16	32	48	64	80	96	112	128	144	160	176	192	208	224	240
0			0	@	P	'	p	N	ı	Á	⌘	⌘	⌘	⌘	⌘	ı
1		!	1	A	Q	a	q	ı	ı	ı	ı	ı	ı	ı	ı	ı
2		"	2	B	R	b	r	ı	ı	ı	ı	ı	ı	ı	ı	ı
3		#	3	C	S	c	s	ı	ı	ı	ı	ı	ı	ı	ı	ı
4		\$	4	D	T	d	t	ı	ı	ı	ı	ı	ı	ı	ı	ı
5		%	5	E	U	e	u	ı	ı	ı	ı	ı	ı	ı	ı	ı
6		&	6	F	V	f	v	ı	ı	ı	ı	ı	ı	ı	ı	ı
7		'	7	G	W	g	w	ı	ı	ı	ı	ı	ı	ı	ı	ı
8		(	8	H	X	h	x	ı	ı	ı	ı	ı	ı	ı	ı	ı
9		)	9	I	Y	i	y	ı	ı	ı	ı	ı	ı	ı	ı	ı
a		*	:	J	Z	j	z	ı	ı	ı	ı	ı	ı	ı	ı	ı
b		+	;	K	[	k	{	ı	ı	ı	ı	ı	ı	ı	ı	ı
c		,	<	L	\	l	|	ı	ı	ı	ı	ı	ı	ı	ı	ı
d		-	=	M	]	m	}	ı	ı	ı	ı	ı	ı	ı	ı	ı
e		.	>	N	^	n	~	ı	ı	ı	ı	ı	ı	ı	ı	ı
f		/	?	O	_	o		ı	ı	ı	ı	ı	ı	ı	ı	ı

New437

hex	0	1	2	3	4	5	6	7	8	9	a	b	c	d	e	f
dez	0	16	32	48	64	80	96	112	128	144	160	176	192	208	224	240
0			0	@	P	'	p	N	J	Á	☼	Ⓛ	μ	α	≡	
1		!	1	A	Q	a	q	ı	U	í	☼	⊥	⊥	β	±	
2		"	2	B	R	b	r	λ	Y	ó	☼	⊥	⊥	Γ	≥	
3		#	3	C	S	c	s	τ	η	ú	|	⊥	⊥	π	≤	
4		\$	4	D	T	d	t	ñ	ρ	ñ	⊥	—	⊥	Σ	∫	
5		%	5	E	U	e	u	ı	Y	Ñ	⊥	+	⊥	σ	∫	
6		&	6	F	V	f	v	ı	Y	á	⊥	⊥	⊥	ı	'	
7		'	7	G	W	g	w	n	ρ	ó	⊥	⊥	⊥	τ	≈	
8		(	8	H	X	h	x	U	ı	ı	⊥	⊥	⊥	φ	'	
9		)	9	I	Y	i	y	'	W	ı	⊥	⊥	⊥	θ	.	
a		*	:	J	Z	j	z	ı	n	ı	⊥	⊥	⊥	Ω	.	
b		+	;	K	[	k	{	ı	φ	½	⊥	⊥	■	δ	ı	
c		,	<	L	\	l	|	ı	£	½	⊥	⊥	■	ω	n	
d		-	=	M	]	m	}	U	Y	ı	⊥	=	■	φ	ı	
e		.	>	N	^	n	~	n	R	«	⊥	⊥	■	e	■	
f		/	?	O	_	o		ı	f	»	ı	⊥	■	n		

NewDig850

hex	0	1	2	3	4	5	6	7	8	9	a	b	c	d	e	f
dez	0	16	32	48	64	80	96	112	128	144	160	176	192	208	224	240
0			0	@	P	'	p	N	J	Á	☼	Ⓛ	δ	N	J	
1		!	1	A	Q	a	q	ı	U	í	☼	⊥	⊥	ı	U	
2		"	2	B	R	b	r	λ	Y	ó	☼	⊥	⊥	λ	Y	
3		#	3	C	S	c	s	τ	η	ú	|	⊥	⊥	τ	η	
4		\$	4	D	T	d	t	ñ	ρ	ñ	⊥	—	⊥	ñ	ρ	
5		%	5	E	U	e	u	ı	Y	Ñ	Á	+	ı	ı	Y	
6		&	6	F	V	f	v	ı	Y	á	Á	á	ı	ı	Y	
7		'	7	G	W	g	w	n	ρ	ó	λ	Á	ı	n	ρ	
8		(	8	H	X	h	x	U	ı	ı	⊙	⊥	ı	U	ı	
9		)	9	I	Y	i	y	'	W	⊙	⊥	⊥	⊥	'	W	
a		*	:	J	Z	j	z	ı	n	ı	⊥	⊥	⊥	ı	n	
b		+	;	K	[	k	{	ı	φ	½	⊥	⊥	■	ı	ı	
c		,	<	L	\	l	|	ı	£	½	⊥	⊥	■	ı	ı	
d		-	=	M	]	m	}	U	Ø	ı	φ	=	ı	ı	ı	
e		.	>	N	^	n	~	n	x	«	Y	⊥	⊥	n	■	
f		/	?	O	_	o		ı	f	»	ı	⊥	■	ı		

OldCode860

רֹט תֹה	0	1	2	3	4	5	6	7	8	9	ב	ג	ד	ה	ו	ז
	0	16	32	48	64	80	96	112	128	144	160	176	192	208	224	240
0			0	@	P	N	J	N	J	á	☼	⊥	⊥	α	≡	
1		!	1	A	Q	ב	ו	ב	À	í	☼	⊥	⊥	β	±	
2		"	2	B	R	ג	ע	ג	È	ó	☼	⊥	⊥	Γ	≥	
3		#	3	C	S	ד	ף	ד	ף	ú	|	⊥	⊥	κ	≤	
4		\$	4	D	T	ה	פ	ã	ö	ñ	⊥	-	⊥	Σ	∫	
5		%	5	E	U	ו	ץ	ו	ץ	ñ	⊥	+	⊥	σ	∫	
6		&	6	F	V	ז	צ	Á	ó	á	⊥	⊥	⊥	í	'	
7		'	7	G	W	ח	ק	ח	ק	ó	⊥	⊥	⊥	τ	≈	
8		(	8	H	X	ט	ר	ט	ı	ı	⊥	⊥	⊥	Φ	'
9		)	9	I	Y	י	ש	Ê	ö	ò	⊥	⊥	⊥	θ	.
ב		*	:	J	Z	ך	ת	ך	ת	ı	⊥	⊥	⊥	Ω	.	
ג		+	;	K	[	כ	{	í	é	½	⊥	⊥	■	ø	∫
ד		,	<	L	\	ל	|	ò	é	½	⊥	⊥	■	ø	∫	
ה		-	=	M	]	ם	}	í	ò	ı	⊥	=	■	ø	²
ו		.	>	N	^	נ	~	Á	ñ	«	⊥	⊥	■	ε	■	
ז		/	?	O	_	ו		À	ó	»	⊥	⊥	■	∫	∫	

Flarro863

רֹט תֹה	0	1	2	3	4	5	6	7	8	9	ב	ג	ד	ה	ו	ז
	0	16	32	48	64	80	96	112	128	144	160	176	192	208	224	240
0			0	@	ג	נ	ג	נ	ג	!	☼	⊥	⊥	α	≡	
1		!	1	ב	ו	ב	ו	ב	È	'	☼	⊥	⊥	β	±	
2		"	2	ג	ע	ג	ע	ג	È	ó	☼	⊥	⊥	Γ	≥	
3		#	3	ד	ף	ד	ף	ד	ף	ú	|	⊥	⊥	κ	≤	
4		\$	4	ה	פ	ה	פ	À	È	"	⊥	-	⊥	Σ	∫	
5		%	5	ו	ץ	ו	ץ	ו	ı	ı	⊥	+	⊥	σ	∫	
6		&	6	ז	צ	ז	צ	Á	ó	á	⊥	⊥	⊥	í	'	
7		'	7	ח	ק	ח	ק	ח	ק	ó	⊥	⊥	⊥	τ	≈	
8		(	8	ט	ר	ט	ר	ט	ı	ı	⊥	⊥	⊥	Φ	'
9		)	9	י	ש	י	ש	ı	ò	ı	⊥	⊥	⊥	θ	.
ב		*	:	ך	ת	ך	ת	ך	ת	ı	⊥	⊥	⊥	Ω	.	
ג		+	;	כ	[	כ	{	כ	é	½	⊥	⊥	■	ø	∫
ד		,	<	ל	\	ל	|	ל	é	½	⊥	⊥	■	ø	∫	
ה		-	=	ם	]	ם	}	=	ò	ı	⊥	=	■	ø	²
ו		.	>	נ	^	נ	~	À	ó	«	⊥	⊥	■	ε	■	
ז		/	?	ו	_	ו		È	ó	»	⊥	⊥	■	∫	∫	

Hebrew865

hex	0	1	2	3	4	5	6	7	8	9	a	b	c	d	e	f
dez	0	16	32	48	64	80	96	112	128	144	160	176	192	208	224	240
0			0	@	P	'	p	N	J	Á	⌘	⌘	⌘	⌘	⌘	⌘
1		!	1	A	Q	a	q	⌘	⌘	í	⌘	⌘	⌘	⌘	⌘	⌘
2		"	2	B	R	b	r	λ	⌘	ó	⌘	⌘	⌘	⌘	⌘	⌘
3		#	3	C	S	c	s	⌘	⌘	ú	⌘	⌘	⌘	⌘	⌘	⌘
4		\$	4	D	T	d	t	⌘	⌘	ñ	⌘	⌘	⌘	⌘	⌘	⌘
5		%	5	E	U	e	u	⌘	⌘	ñ	⌘	⌘	⌘	⌘	⌘	⌘
6		&	6	F	V	f	v	⌘	⌘	á	⌘	⌘	⌘	⌘	⌘	⌘
7		'	7	G	W	g	w	⌘	⌘	ó	⌘	⌘	⌘	⌘	⌘	⌘
8		(	8	H	X	h	x	⌘	⌘	ú	⌘	⌘	⌘	⌘	⌘	⌘
9		)	9	I	Y	i	y	⌘	⌘	⌘	⌘	⌘	⌘	⌘	⌘	⌘
a		*	:	J	Z	j	z	⌘	⌘	⌘	⌘	⌘	⌘	⌘	⌘	⌘
b		+	;	K	[	k	{	⌘	⌘	⌘	⌘	⌘	⌘	⌘	⌘	⌘
c		,	<	L	\	l	|	⌘	⌘	⌘	⌘	⌘	⌘	⌘	⌘	⌘
d		-	=	M	]	m	}	⌘	⌘	⌘	⌘	⌘	⌘	⌘	⌘	⌘
e		.	>	N	^	n	~	⌘	⌘	⌘	⌘	⌘	⌘	⌘	⌘	⌘
f		/	?	O	_	o		⌘	⌘	⌘	⌘	⌘	⌘	⌘	⌘	⌘

CP_1257

hex	0	1	2	3	4	5	6	7	8	9	a	b	c	d	e	f
dez	0	16	32	48	64	80	96	112	128	144	160	176	192	208	224	240
0			0	@	P	`	p	€			°	À	Š	ą	š	
1		!	1	A	Q	a	q		`		±	ı	Ń	ı	ń	
2		"	2	B	R	b	r	,	'	φ	²	Ā	Ń	ā	ņ	
3		#	3	C	S	c	s		"	£	³	Ć	Ó	ć	ó	
4		\$	4	D	T	d	t	„	”	¤		Ä	Ö	ä	ö	
5		%	5	E	U	e	u		μ	Å	Ö	å	ö	
6		&	6	F	V	f	v	†	-	!	¶	Ë	Ö	ë	ö	
7		'	7	G	W	g	w	#	-	§	.	Ē	×	ē	÷	
8		(8	H	X	h	x			∅	∅	Č	U	č	u	
9)	9	I	Y	i	y	‰	™	∅	!	É	Ł	é	ł	
a		*	:	J	Z	j	z			℞	℞	Ž	Ś	ž	ś	
b		+	;	K	[k	{	<	>	«	»	É	Ū	é	ū	
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Ukraine_866

hex	0	1	2	3	4	5	6	7	8	9	a	b	c	d	e	f
dez	0	16	32	48	64	80	96	112	128	144	160	176	192	208	224	240
0			0	@	P	'	p	A	P	a	☼	⊥	⊥	⊥	⊥	⊥
1		!	1	A	Q	a	q	Б	С	б	☼	⊥	⊥	⊥	⊥	⊥
2		"	2	B	R	b	r	В	Т	в	☼	⊥	⊥	⊥	⊥	⊥
3		#	3	C	S	c	s	Г	У	г	|	|	|	|	|	|
4		\$	4	D	T	d	t	Д	Ф	д	|	-	-	-	-	-
5		%	5	E	U	e	u	Е	Х	е	|	+	+	+	+	+
6		&	6	F	V	f	v	Ж	Ц	ж	|	⊥	⊥	⊥	⊥	⊥
7		'	7	G	W	g	w	З	Ч	з	|	|	|	|	|	|
8		(	8	H	X	h	x	И	Ш	и	|	⊥	⊥	⊥	⊥	⊥
9		)	9	I	Y	i	y	Й	Щ	й	|	|	|	|	|	|
a		*	:	J	Z	j	z	К	Ъ	к	|	⊥	⊥	⊥	⊥	⊥
b		+	;	K	[	k	{	Л	Ы	л	|	|	|	|	|	|
c		,	<	L	\	l	!	М	Ь	м	|	|	|	|	|	|
d		-	=	M	]	m	}	Н	Э	н	|	=	=	=	=	=
e		.	>	N	^	n	~	О	Ю	о	|	|	|	|	|	|
f		/	?	O	_	o		П	Я	п	|	⊥	⊥	⊥	⊥	⊥

Kazakhst_866

hex	0	1	2	3	4	5	6	7	8	9	a	b	c	d	e	f
dez	0	16	32	48	64	80	96	112	128	144	160	176	192	208	224	240
0			0	@	P	'	p	A	P	a	☼	⊥	⊥	⊥	⊥	⊥
1		!	1	A	Q	a	q	Б	С	б	☼	⊥	⊥	⊥	⊥	⊥
2		"	2	B	R	b	r	В	Т	в	☼	⊥	⊥	⊥	⊥	⊥
3		#	3	C	S	c	s	Г	У	г	|	|	|	|	|	|
4		\$	4	D	T	d	t	Д	Ф	д	|	-	-	-	-	-
5		%	5	E	U	e	u	Е	Х	е	|	+	+	+	+	+
6		&	6	F	V	f	v	Ж	Ц	ж	|	⊥	⊥	⊥	⊥	⊥
7		'	7	G	W	g	w	З	Ч	з	|	|	|	|	|	|
8		(	8	H	X	h	x	И	Ш	и	|	⊥	⊥	⊥	⊥	⊥
9		)	9	I	Y	i	y	Й	Щ	й	|	|	|	|	|	|
a		*	:	J	Z	j	z	К	Ъ	к	|	⊥	⊥	⊥	⊥	⊥
b		+	;	K	[	k	{	Л	Ы	л	|	|	|	|	|	|
c		,	<	L	\	l	!	М	Ь	м	|	|	|	|	|	|
d		-	=	M	]	m	}	Н	Э	н	|	=	=	=	=	=
e		.	>	N	^	n	~	О	Ю	о	|	|	|	|	|	|
f		/	?	O	_	o		П	Я	п	|	⊥	⊥	⊥	⊥	⊥

Kamenicky

hex	0	1	2	3	4	5	6	7	8	9	a	b	c	d	e	f
dez	0	16	32	48	64	80	96	112	128	144	160	176	192	208	224	240
0			0	@	P	'	p	č	é	á	☼	L	⊥	α	≡	
1		!	1	A	Q	a	q	ü	ž	í	☼	⊥	⊥	β	±	
2		"	2	B	R	b	r	é	ž	ó	☼	T	π	Γ	≥	
3		#	3	C	S	c	s	ď	ō	ú	|	|	⊥	π	≤	
4		\$	4	D	T	d	t	ä	ö	ň	|	-	⊥	Σ	|	
5		%	5	E	U	e	u	Ď	Ó	Ň	|	+	F	σ	J	
6		&	6	F	V	f	v	ř	Ů	Ů	||	⊥	π	μ	÷	
7		'	7	G	W	g	w	č	Ů	Ů	π	||	||	τ	≈	
8		(	8	H	X	h	x	ě	ý	š	⊥	⊥	⊥	φ	*
9		)	9	I	Y	i	y	Ě	Ů	ř	||	π	⊥	θ	*
a		*	:	J	Z	j	z	Ľ	Ů	ř	||	⊥	⊥	Ω	.	
b		+	;	K	[	k	{	í	š	Ř	⊥	π	■	δ	√
c		,	<	L	\	l	!	í	Ľ	ž	⊥	||	■	∞	n	
d		-	=	M	]	m	}	ř	ý	š	⊥	=	■	∅	²
e		.	>	N	^	n	~	Ǻ	Ř	«	⊥	||	■	ε	■	
f		/	?	O	_	o		Ǻ	Ľ	»	⊥	⊥	■	∩		

Mazovia

hex	0	1	2	3	4	5	6	7	8	9	a	b	c	d	e	f
dez	0	16	32	48	64	80	96	112	128	144	160	176	192	208	224	240
0			0	@	P	'	p	ç	ę	ż	☼	L	⊥	α	≡	
1		!	1	A	Q	a	q	ü	ę	ż	☼	⊥	⊥	β	±	
2		"	2	B	R	b	r	é	ř	ó	☼	T	π	Γ	≥	
3		#	3	C	S	c	s	â	ō	ó	|	|	⊥	π	≤	
4		\$	4	D	T	d	t	ä	ö	ň	|	-	⊥	Σ	|	
5		%	5	E	U	e	u	à	ć	ń	|	+	F	σ	J	
6		&	6	F	V	f	v	ą	ū	ź	||	⊥	π	μ	÷	
7		'	7	G	W	g	w	ç	ū	ź	π	||	||	τ	≈	
8		(	8	H	X	h	x	ē	ś	ź	⊥	⊥	⊥	φ	*
9		)	9	I	Y	i	y	ë	Ů	ń	||	π	⊥	θ	*
a		*	:	J	Z	j	z	è	Ů	ń	||	⊥	⊥	Ω	.	
b		+	;	K	[	k	{	ÿ	ę	ź	⊥	π	■	δ	√
c		,	<	L	\	l	|	ř	Ľ	ż	⊥	||	■	∞	n	
d		-	=	M	]	m	}	ć	¥	ı	⊥	=	■	∅	²
e		.	>	N	^	n	~	Ǻ	ś	«	⊥	||	■	ε	■	
f		/	?	O	_	o		Ǻ	f	»	⊥	⊥	■	∩		

Baltic_775

hex	0	1	2	3	4	5	6	7	8	9	a	b	c	d	e	f
dez	0	16	32	48	64	80	96	112	128	144	160	176	192	208	224	240
0			0	e	P	`	p	ó	é	Ā	☒	L	ā	ó	-	
1		!	1	A	Q	a	q	ū	æ	ī	☒	l	č	β	±	
2		"	2	B	R	b	r	é	Æ	ó	☒	τ	ē	ō	"	
3		#	3	C	S	c	s	ā	ō	ž	|	†	ē	Ń	ł	
4		\$	4	D	T	d	t	ä	ö	ž	†	-	i	ō	¶	
5		%	5	E	U	e	u	g	g	ž	Ā	†	š	ō	§	
6		&	6	F	V	f	v	ā	ē	"	č	ū	ū	μ	+	
7		'	7	G	W	g	w	ó	š	:	ę	ū	ū	ń	"	
8		(	8	H	X	h	x	ı	ś	ø	é	ū	ž	κ	°	
9		)	9	I	Y	i	y	ē	ö	ø	†	π	ı	κ	•	
a		*	:	J	Z	j	z	ŗ	ü	˘	||	μ	ŗ	ł	•	
b		+	;	K	Ł	k	{	ŗ	ø	½	π	π	☒	ı	ı	
c		,	<	L	\	l	|	ī	ε	¼	μ	†	☒	o	³	
d		-	=	M	ı	m	}	ž	ø	ł	ı	=	☒	E	²	
e		.	>	N	^	n	˘	Ā	x	«	š	†	☒	N	■	
f		/	?	O	_	o	ô	Ā	κ	»	ı	ž	☒	,		

CRO_ASCII

hex	0	1	2	3	4	5	6	7	8	9	a	b	c	d	e	f
dez	0	16	32	48	64	80	96	112	128	144	160	176	192	208	224	240
0			0	Z	P	ž	p	Č	é	ā	☒	L	μ	α	≡	
1		!	1	A	Q	a	q	ū	æ	ī	☒	l	τ	β	±	
2		"	2	B	R	b	r	é	Æ	ó	☒	τ	π	Γ	≥	
3		#	3	C	S	c	s	ā	ō	ú	|	†	μ	π	≤	
4		\$	4	D	T	d	t	ä	ö	ñ	†	-	τ	Σ	∫	
5		%	5	E	U	e	u	à	ò	ñ	†	†	τ	σ	∫	
6		&	6	F	V	f	v	ā	ū	ā	†	†	π	μ	+	
7		'	7	G	W	g	w	č	ù	ø	π	†	†	τ	≈	
8		(	8	H	X	h	x	ē	y	ı	ı	μ	†	φ	"	
9		)	9	I	Y	i	y	ē	ö	ŗ	†	π	ı	θ	•	
a		*	:	J	Z	j	z	è	ü	˘	||	μ	ŗ	Ω	•	
b		+	;	K	Š	k	š	ı	ø	½	π	τ	☒	δ	∫	
c		,	<	L	D	l	d	ī	ε	¼	μ	†	☒	o	n	
d		-	=	M	Č	m	č	ī	ı	ı	μ	=	☒	ø	²	
e		.	>	N	Č	n	č	Ā	π	«	ı	†	☒	E	■	
f		/	?	O	_	o		Ā	f	»	ı	±	☒	Ń		

Farsi

hex	0	1	2	3	4	5	6	7	8	9	a	b	c	d	e	f
dez	0	16	32	48	64	80	96	112	128	144	160	176	192	208	224	240
0				0	@	P	'	p	~	⊖		•	ƒ	>	-	⋮
1		!	1	A	Q	a	q	⊖	⊖	-	l	±	∫	∫	b	'
2		"	2	B	R	b	r	∕	∕	∕	∕	∕	∕	∫	∫	∫
3		#	3	C	S	c	s	∕	∫	∫	∫	∫	∫	∫	∫	∫
4		\$	4	D	T	d	t	∫	∫	∫	∫	∫	∫	∫	∫	∫
5		%	5	E	U	e	u	∫	∫	∫	∫	∫	∫	∫	∫	∫
6		&	6	F	V	f	v	∫	∫	∫	∫	∫	∫	∫	∫	∫
7		'	7	G	W	g	w	∫	∫	∫	∫	∫	∫	∫	∫	∫
8		(	8	H	X	h	x	∫	∫	∫	∫	∫	∫	∫	∫	∫
9		)	9	I	Y	i	y	∫	∫	∫	∫	∫	∫	∫	∫	∫
a		*	:	J	Z	j	z	∫	∫	∫	∫	∫	∫	∫	∫	∫
b		+	;	K	[	k	[∫	∫	∫	∫	∫	∫	∫	∫	∫
c		,	<	L	\	l	∫	∫	∫	∫	∫	∫	∫	∫	∫	∫
d		-	=	M	]	m	∫	∫	∫	∫	∫	∫	∫	∫	∫	∫
e		.	>	N	^	n	∫	∫	∫	∫	∫	∫	∫	∫	∫	∫
f		/	?	O	_	o	∫	∫	∫	∫	∫	∫	∫	∫	∫	∫

Urdu

hex	0	1	2	3	4	5	6	7	8	9	a	b	c	d	e	f
dez	0	16	32	48	64	80	96	112	128	144	160	176	192	208	224	240
0				0	@	P	'	p	~	⊖		•	ƒ	>	-	⋮
1		!	1	A	Q	a	q	⊖	⊖	-	l	±	∫	∫	b	'
2		"	2	B	R	b	r	∕	∕	∕	∕	∕	∫	∫	∫	∫
3		#	3	C	S	c	s	∕	∫	∫	∫	∫	∫	∫	∫	∫
4		\$	4	D	T	d	t	∫	∫	∫	∫	∫	∫	∫	∫	∫
5		%	5	E	U	e	u	∫	∫	∫	∫	∫	∫	∫	∫	∫
6		&	6	F	V	f	v	∫	∫	∫	∫	∫	∫	∫	∫	∫
7		'	7	G	W	g	w	∫	∫	∫	∫	∫	∫	∫	∫	∫
8		(	8	H	X	h	x	∫	∫	∫	∫	∫	∫	∫	∫	∫
9		)	9	I	Y	i	y	∫	∫	∫	∫	∫	∫	∫	∫	∫
a		*	:	J	Z	j	z	∫	∫	∫	∫	∫	∫	∫	∫	∫
b		+	;	K	[	k	[∫	∫	∫	∫	∫	∫	∫	∫	∫
c		,	<	L	\	l	∫	∫	∫	∫	∫	∫	∫	∫	∫	∫
d		-	=	M	]	m	∫	∫	∫	∫	∫	∫	∫	∫	∫	∫
e		.	>	N	^	n	∫	∫	∫	∫	∫	∫	∫	∫	∫	∫
f		/	?	O	_	o	∫	∫	∫	∫	∫	∫	∫	∫	∫	∫

Greek_DEC

hex	0	1	2	3	4	5	6	7	8	9	a	b	c	d	e	f
dez	0	16	32	48	64	80	96	112	128	144	160	176	192	208	224	240
0				0	@	P	'	p	À	É	Á	"	Ï		Û	
1		!	1	A	Q	a	q	Ë	Æ	Í	±	À	Π	α	π	
2		"	2	B	R	b	r	Η	Æ	Ó	²	Β	Ρ	β	ρ	
3		#	3	C	S	c	s	Ι	Θ	Ú	³	Γ	Σ	γ	σ	
4		\$	4	D	T	d	t	Ä	Ö	Ñ	†	Δ	Τ	δ	τ	
5		%	5	E	U	e	u	à	ò	¥	‡	Ε	Υ	ε	υ	
6		&	6	F	V	f	v	â	ô	!|	||	Z	Φ	ζ	φ	
7		'	7	G	W	g	w	ç	ù	§	¶	H	X	η	x	
8		(	8	H	X	h	x	ê	ó	¿	¶	Θ	Ψ	θ	ψ	
9		)	9	I	Y	i	y	ë	ÿ	®	‡	I	Ω	ι	ω	
a		*	:	J	Z	j	z	è	ø	®	||	K	ά	κ	ς	
b		+	;	K	[	k	[	ÿ	€	«	»	Λ	έ	λ	ύ	
c		,	<	L	\	l	|	ı	£	‡	¶	M	ή	μ	ώ	
d		-	=	M	]	m	]	ì	¥	ı	‡	N	ί	ν	²	
e		.	>	N	^	n	~	ÿ	€	«	¶	Ξ		ξ	■	
f		/	?	O	_	o		ÿ	€	»	¶	Ο	ό	ο		

ELOT_928

hex	0	1	2	3	4	5	6	7	8	9	a	b	c	d	e	f
dez	0	16	32	48	64	80	96	112	128	144	160	176	192	208	224	240
0				0	@	P	'	p				"		Π	θ	π
1		!	1	A	Q	a	q				"	±	À	Ρ	α	ρ
2		"	2	B	R	b	r					²	Β		β	ς
3		#	3	C	S	c	s					³	Γ	Σ	γ	σ
4		\$	4	D	T	d	t				¤	†	Δ	Τ	δ	τ
5		%	5	E	U	e	u				¥		Ε	Υ	ε	υ
6		&	6	F	V	f	v				!	À	Z	Φ	ζ	φ
7		'	7	G	W	g	w				§		H	X	η	x
8		(	8	H	X	h	x				"	Ε	Θ	Ψ	θ	ψ
9		)	9	I	Y	i	y				®	H	I	Ω	ι	ω
a		*	:	J	Z	j	z				®	I	K	Ι	κ	ι
b		+	;	K	[	k	[				«	»	Λ	Υ	λ	ύ
c		,	<	L	\	l	|					¶	M	ά	μ	ό
d		-	=	M	]	m	]					‡	N	έ	ν	ύ
e		.	>	N	^	n	~					Υ	Ξ	ή	ξ	ώ
f		/	?	O	_	o						¶	Ο	ί	ο	

UK_ASCII

hex	0	1	2	3	4	5	6	7	8	9	a	b	c	d	e	f
dez	0	16	32	48	64	80	96	112	128	144	160	176	192	208	224	240
0			0	@	P	'	p	Ç	É	Á	⌘	⌘	⌘	⌘	⌘	⌘
1		!	1	A	Q	a	q	ü	æ	í	⌘	⌘	⌘	⌘	⌘	⌘
2		"	2	B	R	b	r	é	Æ	ó	⌘	⌘	⌘	⌘	⌘	⌘
3		£	3	C	S	c	s	â	ô	ú	|	|	|	|	|	|
4		\$	4	D	T	d	t	ä	ö	ñ	|	-	-	-	-	-
5		%	5	E	U	e	u	à	ò	ñ	|	+	+	+	+	+
6		&	6	F	V	f	v	ã	û	â	|	|	|	|	|	|
7		'	7	G	W	g	w	ç	ù	ø	|	|	|	|	|	|
8		(	8	H	X	h	x	ê	ÿ	¿	|	|	|	|	|	|
9		)	9	I	Y	i	y	ë	ÿ	ˆ	|	|	|	|	|	|
a		*	:	J	Z	j	z	è	Ù	ˆ	|	|	|	|	|	|
b		+	;	K	[	k	{	ÿ	é	½	|	|	|	|	|	|
c		,	<	L	\	l	|	î	£	¼	|	|	|	|	|	|
d		-	=	M	]	m	}	ï	¥	¼	|	|	|	|	|	|
e		.	>	N	^	n	~	ÿ	¤	¼	|	|	|	|	|	|
f		/	?	O	_	o		ÿ	£	¼	|	|	|	|	|	|

US_ASCII

hex	0	1	2	3	4	5	6	7	8	9	a	b	c	d	e	f
dez	0	16	32	48	64	80	96	112	128	144	160	176	192	208	224	240
0			0	@	P	'	p	Ç	É	Á	⌘	⌘	⌘	⌘	⌘	⌘
1		!	1	A	Q	a	q	ü	æ	í	⌘	⌘	⌘	⌘	⌘	⌘
2		"	2	B	R	b	r	é	Æ	ó	⌘	⌘	⌘	⌘	⌘	⌘
3		#	3	C	S	c	s	â	ô	ú	|	|	|	|	|	|
4		\$	4	D	T	d	t	ä	ö	ñ	|	-	-	-	-	-
5		%	5	E	U	e	u	à	ò	ñ	|	+	+	+	+	+
6		&	6	F	V	f	v	ã	û	â	|	|	|	|	|	|
7		'	7	G	W	g	w	ç	ù	ø	|	|	|	|	|	|
8		(	8	H	X	h	x	ê	ÿ	¿	|	|	|	|	|	|
9		)	9	I	Y	i	y	ë	ÿ	ˆ	|	|	|	|	|	|
a		*	:	J	Z	j	z	è	Ù	ˆ	|	|	|	|	|	|
b		+	;	K	[	k	{	ÿ	é	½	|	|	|	|	|	|
c		,	<	L	\	l	|	î	£	¼	|	|	|	|	|	|
d		-	=	M	]	m	}	ï	¥	¼	|	|	|	|	|	|
e		.	>	N	^	n	~	ÿ	¤	¼	|	|	|	|	|	|
f		/	?	O	_	o		ÿ	£	¼	|	|	|	|	|	|

Swedish

hex	0	1	2	3	4	5	6	7	8	9	a	b	c	d	e	f
dez	0	16	32	48	64	80	96	112	128	144	160	176	192	208	224	240
0			0	É	P	é	p	Ç	É	Á	☼	⊥	⊥	⊥	α	≡
1		!	1	A	Q	a	q	ü	æ	í	☼	⊥	⊥	⊥	β	±
2		"	2	B	R	b	r	é	Æ	ó	☼	⊥	⊥	⊥	Γ	≥
3		#	3	C	S	c	s	â	ô	ú	|	|	|	⊥	π	≤
4		□	4	D	T	d	t	ä	ö	ñ	|	-	-	⊥	Σ	∫
5		%	5	E	U	e	u	à	ò	Ñ	|	+	+	⊥	σ	∫
6		&	6	F	V	f	v	Å	û	â	|	|	|	⊥	μ	÷
7		'	7	G	W	g	w	ç	ù	ô	⊥	⊥	⊥	⊥	τ	≈
8		(	8	H	X	h	x	ê	ÿ	¿	|	⊥	⊥	⊥	φ	•
9		)	9	I	Y	i	y	ë	ÿ	ˆ	|	⊥	⊥	⊥	θ	•
a		*	:	J	Z	j	z	è	Ù	ˆ	|	⊥	⊥	⊥	Ω	•
b		+	;	K	X	k	ä	ï	é	½	|	⊥	⊥	⊥	δ	√
c		,	<	L	Ü	l	ö	í	£	¼	|	⊥	⊥	⊥	ω	∞
d		-	=	M	Å	m	ä	i	¥	;	|	=	=	⊥	ø	²
e		.	>	N	Ö	n	ö	Å	¤	«	|	⊥	⊥	⊥	ε	■
f		/	?	O	_	o		Å	f	»	|	⊥	⊥	⊥	∅	∅

German

hex	0	1	2	3	4	5	6	7	8	9	a	b	c	d	e	f
dez	0	16	32	48	64	80	96	112	128	144	160	176	192	208	224	240
0			0	ß	P	'	p	Ç	É	Á	☼	⊥	⊥	⊥	α	≡
1		!	1	A	Q	a	q	ü	æ	í	☼	⊥	⊥	⊥	β	±
2		"	2	B	R	b	r	é	Æ	ó	☼	⊥	⊥	⊥	Γ	≥
3		#	3	C	S	c	s	â	ô	ú	|	|	|	⊥	π	≤
4		\$	4	D	T	d	t	ä	ö	ñ	|	-	-	⊥	Σ	∫
5		%	5	E	U	e	u	à	ò	Ñ	|	+	+	⊥	σ	∫
6		&	6	F	V	f	v	Å	û	â	|	|	|	⊥	μ	÷
7		'	7	G	W	g	w	ç	ù	ô	⊥	⊥	⊥	⊥	τ	≈
8		(	8	H	X	h	x	ê	ÿ	¿	|	⊥	⊥	⊥	φ	•
9		)	9	I	Y	i	y	ë	ÿ	ˆ	|	⊥	⊥	⊥	θ	•
a		*	:	J	Z	j	z	è	Ù	ˆ	|	⊥	⊥	⊥	Ω	•
b		+	;	K	X	k	ä	ï	é	½	|	⊥	⊥	⊥	δ	√
c		,	<	L	Ü	l	ö	í	£	¼	|	⊥	⊥	⊥	ω	∞
d		-	=	M	Ö	m	ö	i	¥	;	|	=	=	⊥	ø	²
e		.	>	N	^	n	ö	Å	¤	«	|	⊥	⊥	⊥	ε	■
f		/	?	O	_	o		Å	f	»	|	⊥	⊥	⊥	∅	∅

Portuguese

hex	0	1	2	3	4	5	6	7	8	9	a	b	c	d	e	f
dez	0	16	32	48	64	80	96	112	128	144	160	176	192	208	224	240
0			0	Ë	P	'	p	Ç	É	Á	⌘	⌘	⌘	⌘	⌘	⌘
1		!	1	A	Q	a	q	ü	æ	í	⌘	⌘	⌘	⌘	⌘	⌘
2		"	2	B	R	b	r	é	Æ	ó	⌘	⌘	⌘	⌘	⌘	⌘
3		#	3	C	S	c	s	â	ô	ú	|	|	⌘	⌘	⌘	⌘
4		\$	4	D	T	d	t	ä	ö	ñ	|	-	⌘	⌘	⌘	⌘
5		%	5	E	U	e	u	à	ò	ñ	|	+	⌘	⌘	⌘	⌘
6		&	6	F	V	f	v	ã	û	ã	|	|	⌘	⌘	⌘	⌘
7		'	7	G	W	g	w	ç	ù	ô	⌘	⌘	⌘	⌘	⌘	⌘
8		(	8	H	X	h	x	ê	ÿ	¿	⌘	⌘	⌘	⌘	⌘	⌘
9		)	9	I	Y	i	y	ë	ÿ	ˆ	⌘	⌘	⌘	⌘	⌘	⌘
a		*	:	J	Z	j	z	è	Ù	ˆ	⌘	⌘	⌘	⌘	⌘	⌘
b		+	;	K	Å	k	å	ÿ	é	½	⌘	⌘	⌘	⌘	⌘	⌘
c		,	<	L	Ç	l	ç	î	£	½	⌘	⌘	⌘	⌘	⌘	⌘
d		-	=	M	Ö	m	ö	ï	¥	ï	⌘	=	⌘	⌘	⌘	⌘
e		.	>	N	^	n	ˆ	À	Æ	«	⌘	⌘	⌘	⌘	⌘	⌘
f		/	?	O	_	o		À	f	»	⌘	⌘	⌘	⌘	⌘	⌘

French

hex	0	1	2	3	4	5	6	7	8	9	a	b	c	d	e	f
dez	0	16	32	48	64	80	96	112	128	144	160	176	192	208	224	240
0			0	à	P	'	p	Ç	É	Á	⌘	⌘	⌘	⌘	⌘	⌘
1		!	1	A	Q	a	q	ü	æ	í	⌘	⌘	⌘	⌘	⌘	⌘
2		"	2	B	R	b	r	é	Æ	ó	⌘	⌘	⌘	⌘	⌘	⌘
3		£	3	C	S	c	s	â	ô	ú	|	|	⌘	⌘	⌘	⌘
4		\$	4	D	T	d	t	ä	ö	ñ	|	-	⌘	⌘	⌘	⌘
5		%	5	E	U	e	u	à	ò	ñ	|	+	⌘	⌘	⌘	⌘
6		&	6	F	V	f	v	ã	û	ã	|	|	⌘	⌘	⌘	⌘
7		'	7	G	W	g	w	ç	ù	ô	⌘	⌘	⌘	⌘	⌘	⌘
8		(	8	H	X	h	x	ê	ÿ	¿	⌘	⌘	⌘	⌘	⌘	⌘
9		)	9	I	Y	i	y	ë	ÿ	ˆ	⌘	⌘	⌘	⌘	⌘	⌘
a		*	:	J	Z	j	z	è	Ù	ˆ	⌘	⌘	⌘	⌘	⌘	⌘
b		+	;	K	°	k	é	ÿ	é	½	⌘	⌘	⌘	⌘	⌘	⌘
c		,	<	L	Ç	l	ù	î	£	½	⌘	⌘	⌘	⌘	⌘	⌘
d		-	=	M	Ë	m	ë	ï	¥	ï	⌘	=	⌘	⌘	⌘	⌘
e		.	>	N	^	n	ˆ	À	Æ	«	⌘	⌘	⌘	⌘	⌘	⌘
f		/	?	O	_	o		À	f	»	⌘	⌘	⌘	⌘	⌘	⌘

Italian

hex	0	1	2	3	4	5	6	7	8	9	a	b	c	d	e	f
dez	0	16	32	48	64	80	96	112	128	144	160	176	192	208	224	240
0			0	Š	P	ù	p	Ç	É	Á	☼	Ł	μ	α	≡	
1		!	1	A	Q	a	q	ü	æ	í	☼	±	⌣	β	±	
2		"	2	B	R	b	r	é	Æ	ó	☼	⌣	π	Γ	≥	
3		£	3	C	S	c	s	â	ô	ú	|	⌣	μ	π	≤	
4		\$	4	D	T	d	t	ä	ö	ñ	⌣	-	Ł	Σ	∫	
5		%	5	E	U	e	u	à	ò	ñ	⌣	+	ƒ	σ	∫	
6		&	6	F	V	f	v	Å	û	å	⌣	⌣	π	μ	÷	
7		'	7	G	W	g	w	ç	ù	ø	π	⌣	⌣	τ	≈	
8		(	8	H	X	h	x	ê	ÿ	¿	⌣	Ł	⌣	ø	•	
9		)	9	I	Y	i	y	ë	ÿ	ˆ	⌣	π	⌣	θ	•	
a		*	:	J	Z	j	z	è	Ù	˘	⌣	Ł	⌣	Ω	•	
b		+	;	K	°	k	à	ÿ	é	½	⌣	⌣	☐	δ	√	
c		,	<	L	Ç	l	ò	í	£	½	⌣	⌣	☐	ω	n	
d		-	=	M	é	m	è	ì	¥	ì	⌣	=	☐	ø	²	
e		.	>	N	^	n	ì	Å	℞	«	⌣	⌣	☐	ε	■	
f		/	?	O	_	o		Å	f	»	⌣	±	☐	η		

Norwegian

hex	0	1	2	3	4	5	6	7	8	9	a	b	c	d	e	f
dez	0	16	32	48	64	80	96	112	128	144	160	176	192	208	224	240
0			0	@	P	'	p	Ç	É	Á	☼	Ł	μ	α	≡	
1		!	1	A	Q	a	q	ü	æ	í	☼	±	⌣	β	±	
2		"	2	B	R	b	r	é	Æ	ó	☼	⌣	π	Γ	≥	
3		#	3	C	S	c	s	â	ô	ú	|	⌣	μ	π	≤	
4		\$	4	D	T	d	t	ä	ö	ñ	⌣	-	Ł	Σ	∫	
5		%	5	E	U	e	u	à	ò	ñ	⌣	+	ƒ	σ	∫	
6		&	6	F	V	f	v	Å	û	å	⌣	⌣	π	μ	÷	
7		'	7	G	W	g	w	ç	ù	ø	π	⌣	⌣	τ	≈	
8		(	8	H	X	h	x	ê	ÿ	¿	⌣	Ł	⌣	ø	•	
9		)	9	I	Y	i	y	ë	ÿ	ˆ	⌣	π	⌣	θ	•	
a		*	:	J	Z	j	z	è	Ù	˘	⌣	Ł	⌣	Ω	•	
b		+	;	K	Æ	k	æ	ÿ	é	½	⌣	⌣	☐	δ	√	
c		,	<	L	Ø	l	ø	í	£	½	⌣	⌣	☐	ω	n	
d		-	=	M	Å	m	å	ì	¥	ì	⌣	=	☐	ø	²	
e		.	>	N	^	n	-	Å	℞	«	⌣	⌣	☐	ε	■	
f		/	?	O	_	o		Å	f	»	⌣	±	☐	η		

Spanish

hex	0	1	2	3	4	5	6	7	8	9	a	b	c	d	e	f
dez	0	16	32	48	64	80	96	112	128	144	160	176	192	208	224	240
0			0	Ñ	P	'	p	Ç	É	Á	☼	⊥	⊥	α	≡	
1		!	1	A	Q	a	q	ü	æ	í	☼	⊥	⊥	β	±	
2		"	2	B	R	b	r	é	Æ	ó	☼	⊥	⊥	Γ	≥	
3		£	3	C	S	c	s	â	ô	ú	|	|	⊥	π	≤	
4		\$	4	D	T	d	t	ä	ö	ñ	|	-	⊥	Σ	∫	
5		%	5	E	U	e	u	à	ò	ñ	|	+	⊥	σ	∫	
6		&	6	F	V	f	v	Ä	Ü	ä	|	|	⊥	μ	÷	
7		'	7	G	W	g	w	ç	ù	ó	⊥	⊥	⊥	τ	≈	
8		(	8	H	X	h	x	ê	ÿ	¿	⊥	⊥	⊥	φ	•
9		)	9	I	Y	i	y	ë	ö	ˆ	|	⊥	⊥	θ	•
a		*	:	J	Z	j	z	è	Ü	ˆ	||	⊥	⊥	Ω	•	
b		+	;	K	[	k	[	ï	ç	¿	⊥	⊥	⊥	δ	∫
c		,	<	L	\	l	|	î	£	¿	⊥	⊥	⊥	ω	ü	
d		-	=	M	]	m	]	ï	¥	ı	⊥	=	⊥	∅	ı
e		.	>	N	^	n	~	À	ℙ	«	⊥	⊥	⊥	ε	§	
f		/	?	O	_	o		À	f	»	⊥	⊥	⊥	∅	∅	

Siemens_Turkish

hex	0	1	2	3	4	5	6	7	8	9	a	b	c	d	e	f
dez	0	16	32	48	64	80	96	112	128	144	160	176	192	208	224	240
0			0	@	P	'	p	Ç	É	á	☼	⊥	⊥	α	ğ	
1		!	1	A	Q	a	q	ü	æ	í	☼	⊥	⊥	β	±	
2		"	2	B	R	b	r	é	Æ	ó	☼	⊥	⊥	Γ	≥	
3		#	3	C	S	c	s	â	ô	ú	|	|	⊥	π	≤	
4		\$	4	D	T	d	t	ä	ö	ñ	|	-	⊥	Σ	∫	
5		%	5	E	U	e	u	à	ò	ñ	|	+	⊥	σ	∫	
6		&	6	F	V	f	v	Ä	Ü	ä	|	|	⊥	μ	ö	
7		'	7	G	W	g	w	ç	ù	ó	⊥	⊥	⊥	φ	≈	
8		(	8	H	X	h	x	ê	ÿ	¿	⊥	⊥	⊥	φ	•
9		)	9	I	Y	i	y	ë	ö	ˆ	|	⊥	⊥	θ	•
a		*	:	J	Z	j	z	è	Ü	ˆ	||	⊥	⊥	Ω	•	
b		+	;	K	[	k	[	ï	ç	¿	⊥	⊥	⊥	δ	∫
c		,	<	L	\	l	|	î	£	¿	⊥	⊥	⊥	ü	ü	
d		-	=	M	]	m	]	ï	¥	ı	⊥	=	⊥	∅	ı
e		.	>	N	^	n	~	À	ℙ	«	⊥	⊥	⊥	ε	§	
f		/	?	O	_	o		À	f	»	⊥	⊥	⊥	∅	ö	

DEC_Turkish

hex	0	1	2	3	4	5	6	7	8	9	a	b	c	d	e	f
dez	0	16	32	48	64	80	96	112	128	144	160	176	192	208	224	240
0			0	@	P	'	p	Ç	É	á	☼	Ł	Ǻ	α	ğ	
1		!	1	A	Q	a	q	Ü	æ	í	☼	±	⸤	β	±	
2		"	2	B	R	b	r	é	Æ	ó	☼	⸤	⸤	Γ	≥	
3		#	3	C	S	c	s	â	ô	ú	|	⸤	⸤	π	≤	
4		\$	4	D	T	d	t	ä	ö	ñ	⸤	-	⸤	Σ	∫	
5		%	5	E	U	e	u	ä	ö	ñ	⸤	+	⸤	σ	∫	
6		&	6	F	V	f	v	á	ó	á	⸤	⸤	⸤	μ	ö	
7		'	7	G	W	g	w	ç	ù	ó	⸤	⸤	⸤	ç	≈	
8		(	8	H	X	h	x	ë	ÿ	¿	⸤	⸤	⸤	ϕ	•	
9		)	9	I	Y	i	y	ë	ÿ	¿	⸤	⸤	⸤	θ	•	
a		*	:	J	Z	j	z	ë	ÿ	¿	⸤	⸤	⸤	Ω	•	
b		+	;	K	[	k	[	ÿ	ϕ	¿	⸤	⸤	⸤	ō	ƒ	
c		,	<	L	\	l	|	ÿ	£	¿	⸤	⸤	⸤	∞	ü	
d		-	=	M	]	m	]	ÿ	¥	¿	⸤	⸤	⸤	∅	²	
e		.	>	N	^	n	~	ÿ	⸤	¿	⸤	⸤	⸤	§	ε	§
f		/	?	O	_	o		ÿ	⸤	¿	⸤	⸤	⸤	∅	∅	ö

12 Command Sets

12.1 Epson ESC/P2 emulation command list

Command	Function
BEL	Beeper
BS	Backspace
HT	Horizontal Tab
LF	Line Feed
VT	Vertical Tab
FF	Form Feed
CR	Carriage Return
SO	Double-Wide Printing 1 Line
SI	Select Condensed Mode
DC2	Cancel Condensed Mode
DC4	Cancel Double-Wide Printing 1 Line
CAN	Cancel Line
ESC SO	Double-Wide Printing 1 Line
ESC SI	Select Condensed Mode
ESC SP	Set Inter Character Space
ESC !	Master Select
ESC #	Cancel MSB Control
ESC \$	Set absolute horizontal print position
ESC %	Select user-defined set
ESC &	Define user-defined characters
ESC (-	Select line/score
ESC (B	Bar code setup and print
ESC (C	Set page length in define unit
ESC (G	Select graphics mode
ESC (U	Set unit
ESC (V	Set absolute vertical print position
ESC (^	Print data as characters
ESC (c	Set page format
ESC (t	Assign character table
ESC (v	Set relative vertical print position
ESC *	Select bit image
ESC +	Select n/360" Line Spacing
ESC -	Auto Underscore
ESC .	Print raster graphics
ESC 0	Select 1/8" Line Spacing
ESC 2	Select 1/6" Line Spacing
ESC 3	Set Graphics Line Spacing (n/180")
ESC 4	Select Italic Mode
ESC 5	Cancel Italic Mode
ESC 6	Enable Printable Characters
ESC 7	Enable Upper Control Codes

Command	Function
ESC :	Copy ROM to RAM
ESC <	Select Unidirectional Mode 1 Line
ESC =	Set MSB to 0
ESC >	Set MSB to 1
ESC ?	Reassign Graphics Mode
ESC @	Initialize Printer
ESC A	Set n/60" Line Spacing
ESC B	Set Vertical Tabs
ESC C	Set Page Length in Lines
ESC C 0	Set Page Length in Inches
ESC D	Set horizontal tabs
ESC E	Select Emphasized Mode
ESC F	Cancel Emphasized Mode
ESC G	Select Double-strike Mode
ESC H	Cancel Double-strike Mode
ESC J	Advance print position
ESC K	Select 60-dpi graphics
ESC L	Select 120-dpi graphics
ESC M	Select 12 cpi
ESC N	Set bottom margin
ESC O	Cancel bottom margin
ESC P	Select 10 cpi
ESC Q	Set right margin
ESC R	Select an international character set and code page
ESC S	Select Subscript or Superscript Printing
ESC T	Cancel Subscript or Superscript Printing
ESC U	Turn unidirectional mode on/off
ESC W	Turn Double-wide Mode On/Off
ESC Y	Select 120-dpi, double-speed graphics
ESC Z	Select 240-dpi graphics
ESC \	Set relative horizontal print position
ESC c	Set horizontal motion index(HMI)
ESC g	Select 15 cpi
ESC k	Select Typestyle Family
ESC l	Set left margin
ESC p	Turn Proportional Mode On/Off
ESC q	Select Character Style
ESC t	Select character table
ESC w	Turn Double-high Mode On/Off
ESC x	Select Letter Quality or Draft
ESC y	Select draft/super draft
ESC Y	Select High-speed Double-density Graphics Mode
DEL	Delete Character

12.2 IBM emulation control codes

Command	Function
BS	Backspace
HT	Horizontal tab
CR	Carriage return
ESC BS	Backspace
ESC HT	Horizontal tab
ESC CR	Carriage return
ESC D	Set horizontal tabs
ESC X	Set horizontal margins
ESC d	Relative mode inline forward
LF	Line feed
VT	Vertical tab
FF	Form feed
ESC LF	Line feed
ESC VT	Vertical tab
ESC FF	Form feed
ESC 0	Select 1/8" line spacing
ESC 1	Select 7/72" line spacing
ESC 2	Start text line spacing
ESC 3	Set graphics line spacing
ESC 4	Set top of form
ESC 5	Automatic line feed
ESC A	Set text line spacing
ESC B	Set vertical tabs
ESC C	Set form length in lines
ESC C NUL	Set form length in inches
ESC J	Graphics variable line spacing
ESC N	Set automatic perforation skip
ESC O	Cancel automatic perforation skip
ESC [\	Set vertical units
ESC]	Reverse line feed
SO	Double-wide printing by line
SI	Condensed printing
DC2	Select 10 cpi
DC4	Cancel double-wide printing by line
ESC SO	Double-wide printing by line
ESC SI	Condensed printing
ESC DC2	Select 10 cpi
ESC DC4	Cancel double-wide printing by line
ESC -	Continuous underscore
ESC :	Select 12 cpi
ESC E	Select emphasized mode
ESC F	Cancel emphasized mode

Command	Function
ESC G	Select double strike mode
ESC H	Cancel double strike mode
ESC I	Set print mode
ESC P	Proportional space mode
ESC S	Start subscript or superscript printing
ESC T	Cancel subscript or superscript printing
ESC W	Continuous double-wide printing
ESC [-	Score select
ESC [@	Set presentation highlight
ESC [I	Set font global
ESC [d	Set print quality
ESC _	Continuous over score
ESC 6	Select character set 2
ESC 7	Select character set 1
ESC =	Character font image download
ESC [T	Set code page
ESC \	Print continuously from all character chart
ESC ^	Print single character from all character chart
ESC K	Normal density bit image graphics
ESC L	Dual density bit image graphics
ESC Y	Dual density bit image graphics
ESC Z	High density bit image graphics
ESC [g	High resolution graphics
ESC [f	Setup barcode parameter
ESC [p	Set barcode data
DEL	Beeper
DC1	Select printer
DC3	Deselect printer
CAN	Cancel Data
ESC BEL	Beeper
ESC DC1	Select printer
ESC DC3	Deselect printer
ESC CAN	Cancel Data
ESC Q	Deselect printer
ESC R	Set all tabs to power on settings
ESC U	Set print direction
ESC [K	Set initial condition
ESC j	Stop printing
ESC *	Select graphics mode
ESC 3(AGM)	Set graphics line spacing(n/180")
ESC A(AGM)	Set text line spacing(n/60")
ESC J(AGM)	Graphics variable line spacing(n/180")

FCC STATEMENT

Changes or modifications not expressly approved by the responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

Consult the dealer or an experienced radio/TV technician for help.

DASCOM REPRESENTATIVES

GERMANY(EMEA)

DASCOM Europe GmbH
Heuweg 3
89079 Ulm
Germany
Tel.: +49 (0) 731 2075 0
Fax: +49 (0) 731 2075 100
www.dascom.com

AMERICAS

DASCOM Americas Corporation
34 Lakeview Court
Verona, VA 24482, USA
Phone:+1 (877) 434 1377
Fax: +1 (877) 334 0549
www.dascom.com

SINGAPORE (ASIA PACIFIC)

DASCOM AP Pte Ltd
2 Jurong East Street 21
05-42, IMM Building
Singapore 609601
Phone:+65 6760 8833
Fax: +65 6760 1066
www.dascom.com

CHINA

JIANGMEN DASCOM COMPUTER
PERIPHERALS CO., LTD
No.399, Jinxing Road,
Jianghai District Jiangmen,
P.R. China
www.dascom.com

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