IDTech

MD22292B 9.2 Million Pixels Ultra Wide View Color
TFT LCD Monitor

User's Guide

Danger Statements

⚠ **DANGER**

To avoid shock hazard:

Do not remove the covers.

Do not operate this product unless the stand is attached.

Do not connect or disconnect this product during an electrical storm.

The power cord plug must be connected to a properly wired and grounded power outlet.

Any equipment to which this product will be attached must also be connected to properly wired and grounded power outlets.

To isolate the monitor from the electrical supply, you must remove the plug from the power outlet. The power outlet should be easily accessible.

Handling:

Your color monitor is heavy, so handle it with care. IBM recommends that this monitor is moved or lifted by two people.

⚠ **DANGER**

Pour éviter les risques d'électrocution :

Ne retirez pas les capots du moniteur.

N'utilisez pas ce produit si le socle n'est pas fixé.

Ne connectez, ni ne déconnectez ce produit pendant un orage.

Le câble d'alimentation doit être connecté à une prise électrique correctement mise à la terre et en bon état de marche.

Tout équipement auquel ce produit est relié doit être également connecté à une prise correctement mise à la terre et en bon état de marche.

Pour isoler le moniteur de la source d'alimentation électrique, vous devez le débrancher de la prise électrique. Cette prise doit être facile d'accès

Manutention :

Votre moniteur couleurs est lourd et doit donc être manipulé avec soin. IBM vous conseille de le déplacer ou de le porter à deux.

⚠ **GEFAHRENHINWEIS**

Um die Gefahr eines elektrischen Schlags zu vermeiden, folgendes beachten:

Unter keinen Umst nden die Abdeckungen abnehmen.

Das Produkt nicht in Betrieb nehmen, wenn der Sockel nicht montiert ist.

Das Ger t nicht w hrend eines Gewitters an eine Steckdose anschließen oder von ihr trennen.

Das Netzkabel ist an eine ordnungsgem ß verdrahtete und geerdete Steckdose anzuschließen.

Jedes Ger t, mit dem dieses Produkt verbunden wird, muß ebenfalls an eine ordnungsgem ß verdrahtete und geerdete Steckdose angeschlossen werden.

Um den Monitor von der Stromversorgung zu trennen, muß der Stecker aus der Steckdose gezogen werden. Die Steckdose sollte leicht zug nglich sein.

Handhabungshinweis:

Ihr Farbbildschirm ist schwer. Sie sollten daher beim Transport vorsichtig vorgehen. IBM empfiehlt Ihnen, den Bildschirm zu zweit anzuheben bzw. zu tragen.

⚠ **GEVAAR**

Ga als volgt te werk om het gevaar van een elektrische schok te voorkomen:

Verwijder in geen enkel geval de kap.

Stel dit produkt alleen in werking als de voet is bevestigd.

Sluit dit apparaat niet aan op, of verbreek de aansluiting van dit apparaat niet van een contactdoos tijdens onweer.

Het netsnoer moet worden aangesloten op een geaarde contactdoos met correcte bedrading.

Ook alle apparatuur waarop dit produkt wordt aangesloten moet zijn aangesloten op een contactdoos met correcte bedrading.

Om het beeldscherm te ontkoppelen van de netvoeding, dient u de stekker uit de contactdoos te trekken. De contactdoos dient goed toegankelijk te zijn.

Verplaatsing:

Uw kleurenmonitor is zwaar, ga er dus voorzichtig mee om. IBM raadt aan dat het tillen of verplaatsen ervan door twee mensen gebeurt.

⚠ PELIGRO

Para evitar riesgos de descargas el ctricas:

No retire bajo ning n concepto las cubiertas.

No maneje el monitor sin antes acoplar el soporte.

No conecte ni desconecte el equipo de una toma de alimentaci n durante una tormenta el ctrica.

El cable de alimentaci n debe estar conectado a un enchufe debidamente cableado y con toma de tierra.

Cualquier equipo al que se vaya a conectar este producto tambi n debe estar conectado a tomas de alimentaci n cableadas y conectadas a tierra correctamente.

Para aislar el monitor del suministro el ctrico, debe retirar el enchufe de la toma de alimentaci n. Esta toma deberá ser de fácil acceso.

Movimentazione del monitor:

Il monitor a colori pesante, si consiglia quindi di maneggiarlo con attenzione. IBM raccomanda che il monitor venga mosso o sollevato da due persone.

⚠ PERICOLO

Per evitare il rischio di scariche elettriche:

Non rimuovere nessuna parte del telaio.

Non accendere il prodotto se il piedistallo non stato montato.

Non collegare o scollegare il prodotto nel corso di un temporale.

La spina del cavo di alimentazione deve essere collegata ad una presa di corrente con messa a terra, installata in maniera appropriata.

Le apparecchiature a cui il prodotto viene attaccato devono essere collegate a prese di corrente con messa a terra, installate in maniera appropriata.

Per isolare il monitor dalla corrente elettrica, staccare la spina dalla presa di alimentazione, che deve essere facilmente accessibile.

Manipulaci ón:

El monitor de color es pesado, por lo que debe manipularlo con cuidado. IBM recomienda moverlo con la ayuda de dos personas.

⚠ *PERIGO*

Para evitar o perigo de choques el tricos:

Não retire as coberturas.

Não utilize este produto antes de montar a base.

Não ligue nem desligue este produto durante uma tempestade el trica.

O cabo de alimenta ão deve ser ligado a uma tomada el trica devidamente ligada à terra.

Qualquer equipamento ligado a este produto deve estar ligado a tomadas el tricas devidamente ligadas à terra.

Para isolar o monitor da fonte de alimenta ão, retire a plug do cabo de alimenta ão da tomada el trica. A tomada el trica deve ser de fácil acesso.

Manuseio:

Seu monitor colorido pesado, então manuseie-o com cuidado. Se o peso for superior a 18 (dezoito) Kg., a IBM recomenda que o monitor seja movido ou carregado por duas pessoas.

⚠ *FARE*

S ådan undg år du elektrisk stød:

Kabinettet m under ingen omst ndigheder fjernes.

Undg at anvende dette produkt, uden at vippe/drejefoden er monteret.

Undg at tilslutte eller frakoble dette produkt i tordenvejr.

Netledningen skal v re tilsluttet en korrekt jordet stikkontakt med korrekt ledningsf ring.

Alt udstyr, som tilsluttes dette produkt, skal ogs v re tilsluttet korrekt jordede stikkontakter med korrekt ledningsf ring.

For at isolere sk rmen fra str mforsyningen, skal stikket tages ud af stikkontakten. Stikkontakten b r v re let tilg ngelig.

H åndtering:

Farvesk rmen er tung, s den skal h ndteres forsigtigt. IBM anbefaler, at sk rmen flyttes eller l ftes af to personer.

⚠ *FARE*

Slik unng r du fare for elektrisk st t:

Ikke ta av dekslene.

Ikke bruk produktet dersom sokkelen ikke er montert.

Ikke koble produktet til eller fra under tordenv r.

Pluggen p str mledningen m kobles til korrekt montert og jordet str muttak.

Utstyr som dette produktet eventuelt blir koblet til, m ogs kobles til korrekt montert og jordet str muttak.

For isolere skjermen fra str mkilden m du ta ut pluggen fra str muttaket. Str muttaket b r v re lett tilgjengelig.

Käsittely:

V rin ytt on painava, joten k sittele sit varoen. IBM suosittelee, ett kaksi henkil siirt tai nostaa sit .

⚠️ *Varning - livsfara*

För att undvika risk för elektriska stötar måste du tänka på följande:

- Ta inte bort några skyddskåpor.
- Använd inte den här produkten innan du har satt fast stativet.
- Anslut inte produkten till ett eluttag under åskväder. Koppla inte heller ur produkten från ett eluttag under åskväder.
- Strömkabeln måste anslutas till ett felfritt och jordat uttag.
- All utrustning som den här produkten kopplas till måste också anslutas till felfria och jordade uttag.
- För att bryta strömmen till bildskärmen måste du dra ut kontakten. Vägguttaget bör vara lätt att komma åt.

Hantering:

- Färgskärmen är tung och bör därför hanteras försiktigt. IBM rekommenderar att den flyttas eller lyfts av två personer.

⚠️ *VAARA*

Sähköiskun vaaran välttämiseksi:

- Älä avaa laitteen kansia missään tilanteessa.
- Älä käytä laitetta, ellei jalustaa ole kiinnitetty.
- Älä kytke laitetta pistorasiaan tai irrota sitä pistorasiasta ukonilman aikana.
- Virtajohto on kytkettävä asianmukaisesti johdotettuun ja maadoitettuun pistorasiaan.
- Kaikki muutkin laitteet, joihin tämä tuote on liitetty, on kytkettävä asianmukaisesti johdotettuihin pistorasioihin.
- Kun haluat erottaa näyttimen sähköverkosta, sinun pitää irrottaa sen verkkojohto pistorasiasta. Pistorasian pitäisi olla mahdollisimman lähellä näytintä ja vaivattomasti käsillä.

Håndtering:

Värimonitorinne on painava, joten käsitelkää sitä varovasti. IBM suosittelee, että monitorin siirtämiseen tai kantamiseen käytetään kahta henkilöä.

⚠️ *ΚΙΝΔΥΝΟΣ*

Για την αποφυγή κινδύνου ηλεκτροπληξίας:

- Μην αφαιρείτε τα καλύμματα.
- Μη θέτετε το προϊόν αυτό σε λειτουργία χωρίς να είναι στερεωμένη η βάση του.
- Μη συνδέετε ή αποσυνδέετε το προϊόν αυτό κατά τη διάρκεια ηλεκτροθύελλας.
- Το φις του καλωδίου ρευματολήπτη πρέπει να συνδεθεί σε μια πρίζα με σωστή καλωδίωση και γείωση.
- Κάθε συσκευή στην οποία συνδεθεί αυτό το προϊόν πρέπει επίσης να συνδεθεί σε πρίζα με σωστή καλωδίωση και γείωση.
- Για να απομονώσετε την οθόνη από την παροχή ρεύματος, πρέπει να αφαιρέσετε το φις από την πρίζα. Η πρίζα πρέπει να είναι σε σημείο εύκολα προσβάσιμο.

Χειρισμός:

Η έγχρωμη οθόνη σας είναι βαριά, γι'αυτό χειριστείτε την με προσοχή. Η IBM συνιστά η οθόνη να μεταφέρεται ή να σηκώνεται από δύο άτομα.

⚠ TEHLİKE

Elektrik çarpması tehlikesinden kaçınmak için:

- Kapakları çıkarmayınız.
- Bu cihazı kaidesine takılı durumda değilken çalıştırmayınız.
- Bu cihazı elektriksel fırtına sırasında prize takmayınız veya prizden çıkarmayınız.
- Elektrik kablosunun fişi, elektrik ve toprak bağlantıları usulüne uygun olarak yapılmış bir prize takılmalıdır.
- Bu cihazın bağlanacağı diğer tüm cihazlar da elektrik ve toprak bağlantıları usulüne uygun olarak yapılmış prize takılmış olmalıdır.
- Monitörün elektrikle bağlantısını kesmek için fişini prizden çekmeniz gereklidir. Priz, kolayca erişilebilecek bir yerde olmalıdır.

Kaldırma:

Renkli monitörünüz ağırdır; kaldırırken dikkatli olunuz. IBM, monitörün iki kişi tarafından taşınmasını veya kaldırılmasını tavsiye etmektedir.

⚠ 危険

感電を防止するため：

* カバーを取り除かないでください。
* スタンドを取り付けないで本製品を操作しないでください。
* 雷の発生時には、本製品の取り付けまたは取り外しを行わないでください。
* 電源コードは正しく配線および接地された電源に接続してください。
* 本製品が接続されるすべての装置もまた正しく配線および接地された電源に接続されている必要があります。
* このモニターを電源から切り離すためには、コンセントから電源プラグを抜く必要があります。コンセントは使用しやすい場所に配置されている必要があります。

⚠ OPREZ!

Da biste izbjegli opasnost od strujnog udara:

- Nemojte otvarati kućište ure aja.
- Nemojte upotrebljavati ovaj ure aj dok ne postavite postolje.
- Nemojte spajati i odspajati ure aj za vrijeme oluje.
- Naponski kabel mora biti priključen u odgovarajuće uzemljenu utičnicu.
- Bilo koja oprema na koju će ovaj ure aj biti spojen tako er mora biti priključena u odgovarajuće uzemljenu utičnicu.
- Da biste isključili ure aj iz struje, iskopčajte utikač iz utičnice. Utičnica treba biti lako dostupna.

Rukovanje:

- Vaš monitor je težak, zato rukujte njime pažljivo. IBM preporuča da ovaj monitor podižu ili pomiču dvije osobe.

⚠ ОПАСНО

Чтобы избежать поражения током:
- Не снимайте крышки устройства.
- Не работайте с данным устройством, если оно не установлено на подставку.
- Не подключайте и не отключайте устройство во время грозы.
- Подключайте кабель питания только к надлежащим образом заземленной и правильно подключенной розетке.
- Все оборудование, с которым будет соединено данное устройство, также должно быть подключено только к надлежащим образом заземленным и правильно подключенным розеткам.
- Для отключения монитора от сети необходимо вынуть вилку кабеля питания из розетки. Необходимо обеспечить удобный доступ к розетке.

Внимание:
- Ваш монитор достаточно тяжел, обращаться с ним следует осторожно. IBM рекомендует перемещать и поднимать монитор вдвоем.

⚠ PERICOL!

Pentru a evita riscul unui oc:
- Nu indepărta i carcasele
- Nu utiliza i acest produs fără a-i ata a suportul
- Nu conecta i sau deconecta i echipamentul în timpul unei varia ii de tensiune
- Echipamentul trebuie conectat corect la re eaua de electricitate, iar priza trebuie să aibă împământare
- Orice alt produs la care va fi ata at echipamentul trebuie să fie conectat asemănător la re eaua de electricitate, iar priza trebuie să aibă împământare
- Pentru a izola monitorul de sursa electrică, cablul de tensiune trebuie scos din priză. Priza electrică trebuie sa fie u or accesibilă.

Manipulare
- Monitorul color este un echipament greu, deci trebuie manevrat cu aten ie. IBM recomandă ca acest monitor sa fie mi cat sau ridicat de către două persoane.

⚠ Nebezpečí

Abyste zabránili nebezpečí úrazu elektrickým proudem:
- Neodstraňujte kryty.
- Nepoužívejte tento produkt, pokud není umístěn na příslušném podstavci.
- Nepřipojujte ani neodpojujte produkt za bouřky.
- Napájecí kabel smí být připojen pouze do řádně zapojené elektrické zásuvky.
- Veškerá zařízení, ke kterým je tento produkt připojen, smějí být rovněž připojena pouze do řádně zapojené zásuvky.
- Abyste odpojili monitor od zdroje elektrické energie, musíte odpojit elektrickou zástrčku ze zásuvky. Zásuvka by měla být umístěna tak, aby byla snadno přístupná.

Přeprava:
- Váš barevný monitor je těžký. Přenášejte ho proto opatrně. Pokud je monitor těžší než 18 kg, doporučuje IBM, aby byl monitor přenášen nebo zvedán dvěma osobami.

⚠ Nebezpečenstvo!

Za účelom predchádzania úrazu elektrickým prúdom:

- Neodjímajte kryty produktu.
- Neprevádzkujte produkt pokiaľ nie je pripojený podstavec.
- Nezapájajte alebo neodpájajte tento produkt počas elektrickej búrky.
- Konektor napájacej šnúry musí byť pripojený do správne zapojenej a uzemnenej elektrickej zásuvky.
- Akékoľvek zariadenie ku ktorému bude tento produkt zapojený musí taktiež byť pripojené do správne zapojenej a uzemnenej elektrickej zásuvky.
- Ak treba izolovať monitor od elektrického napātia, je treba odpojiť napájaciu šnúru zo zásuvky.

Zaobchádzanie:

- Váš farebný monitor je ťažký, preto s ním zaobchádzajte opatrne. IBM odporúča aby tento monitor presúvali alebo zdvíhali dve osoby.

⚠ UWAGA NIEBEZPIECZENSTWO!

Aby uniknac porazenia pradem elektrycznym:

- Nie nalezy otwierac obudowy.
- Nie korzystac z urzadzenia bez zamontowanej podstawki.
- Nie nalezy podlaczac ani odlaczac urzadzenia podczas burzy z wyladowaniami elektrycznymi.
- Kabel zasilajacy musi byc podlaczony do poprawnie zainstalowanego i uziemionego gniazda elektrycznego.
- Urzadzenia do których bedzie podlaczany ten produkt również musza wykorzystywac poprawnie zainstalowane i uziemione gniazda elektryczne.
- Dla odlaczenia monitora od zródla zasilania nelezy wyciagnac przewód zasilajacy z gniazda elektrycznego. Gniazdo elektryczne musi byc latwo dostepne.

Obsluga:

- Monitor kolorowy jest ciezki, zachowaj ostroznosc przy przenoszeniu. IBM radzi by monitor byl przenoszony przez dwie osoby.

⚠ ВНИМАНИЕ!

За да избегнете риск от токов удар:

- Не махайте предпазните капаци.
- Не използвайте продукта, освен ако не е закачена стойката.
- Не свързвайте и не разкачайте този продукт по време на гръмотевична буря.
- Куплунгът на кабела за захранване трябва да бъде свързан към правилно окабелен и заземен контакт.
- Всяко оборудване, към което този продукт ще се свързва, също трябва да бъде свързано към правилно окабелени и заземени контакти.
- За да изолирате монитора от електрическото захранване, трябва да извадите куплунга от контакта. Контактът трябва да бъде лесно достъпен.

Местене:

- Вашият цветен монитор е тежък, така че местете го внимателно. IBM препоръчва мониторът да се носи от двама души.

⚠ NEVARNOST!

Da bi se izognili električnemu udaru:

- Ne odstranjujte pokrova
- Ne vključujte tega izdelka, preden ni pritrjen podstavek
- Med nevihto priklopa ali izklopa izdelka ne priporočamo
- Vtikač napajalnega kabla mora biti priključen s primerno ožičeno
- In ozemljeno napajalno vtičnico
- Katerakoli oprema, na katero povežete ta izdelek, mora biti prav tako priključena na primerno ožičene in ozemljene napajalne vtičnice
- Zato da monitor ločite od električnega napajanja, morate vtikač potegniti iz napajalne vtičnice. Napajalna vtičnica mora biti lahko dostopna.

Ravnanje z monitorjem:

- Vaš barvni monitor je težak, zato z njim ravnajte še posebej previdno. IBM priporoča, da ta monitor premikata ali dvigata po dve osebi hkrati.

⚠ Veszély!

Az áramütés elkerülése érdekében:

- Ne távolítsa el a burkolatot.
- Ne üzemeltesse a monitort a talp felszerelése nélkül.
- Villámlással kísért vihar idején ne csatlakoztassa a monitort az elektromos hálózatra, illetve arról ne válassza le.
- Az elektromos kábel csatlakozóját csak szabályosan bekötött és földelt dugaszolóaljzathoz csatlakoztassa.
- Csak olyan berendezéshez kapcsolja a monitort, amely szintén szabályosan bekötött és földelt dugaszolóaljzathoz van csatlakoztatva.
- A monitor áramellátásának megszüntetéséhez húzza ki az elektromos kábel csatlakozóját a dugaszolóaljzatból. A dugaszolóaljzatnak könnyen hozzáférhetőnek kell lenni.

Mozgatás:

- Ez a színes monitor nehéz, ezért kérjük, óvatosan kezelje. Az IBM azt tanácsolja, hogy mozgatását lehetőség szerint két ember végezze, ha súlya meghaladja a 18 kg-ot.

⚠ خطر

لتجنب الخطورة:

- لا تقم بنزع الغطاء.
- لا تقم بتشغيل هذا المنتج ما لم يتم توصيل الحامل.
- لا تقم بتوصيل أو فصل هذا المنتج أثناء سريان التيار الكهربائي.
- يجب توصيل السلك الكهربائي بمخرج تيار كهربائي تم توصيل أسلاكه أرضيا بطريقة صحيحة.
- قم بتوصيل أي أجهزة يتم ارفاقها بهذا المنتج بمخارج كهربائية تم توصيل أسلاكها أرضيا بطريقة صحيحة.
- لعزل الشاشة عن المصدر الكهربائي، يكون من الضروري أن تقوم بنزع القابس من المخرج الكهربائي. بحيث يكون من السهل استخدام المخرج الكهربائي.

طريقة رفع الشاشة:

- تعد الشاشة الخاصة بك ثقيلة، لذلك، يجب توخي الحذر عند رفعها. اذا كان وزن الشاشة يتعدى 18 كجم، ستطلب شركة IBM أن يقوم شخصان برفع أو تحريك الشاشة.

⚠ 위험

전기 충격을 피하려면,
- 제품의 덮개를 제거하지 마십시오.
- 스텐드가 부착되어 있지 않으면 이 제품을 작동시키지 마십시오.
- 뇌우를 동반할 때는 제품을 연결하거나 분리하지 마십시오.
- 전원 코드를 올바르게 배선 및 접지된 콘센트에 연결해야 합니다.
- 이 제품에 연결할 모든 장비는 올바르게 배선 및 접지된 콘센트에 연결되어 있어야 합니다.
- 모니터를 전기 공급 장치에서 분리시키려면, 콘센트에서 플러그를 제거해야 합니다. 콘센트는 접근하기 쉬운 곳에 있어야 합니다.

취급:
- 저희 컬러 모니터는 무거우므로 주의해서 다루십시오. IBM은 모니터의 무게가 18Kg 이상일 때 두 사람이 움직이거나 들어올릴 것을 권장합니다.

⚠ 危险

为避免电击危险:
- 不可卸下外壳。
- 不可在未装上支架的情况下操作本产品。
- 不可在雷暴期间连接或断开连接本产品。
- 电源线插头必须连接到正确连线并妥善接地的电源插座。
- 本产品将要连接到的任何设备也必须连接到正确连线并妥善接地的电源插座。
- 要断开显示器的供电, 必须从电源插座上拔下插头。电源插座必须可以方便地触及到。

搬运:
- 彩色显示器很重, 所以请搬运时小心。如果重量大于 18 Kg, IBM 建议由两个人来移动或抬起显示器。

⚠ 危險

為了避免撞擊:
- 請勿移除外殼。
- 一定要有支架才能使用此產品。
- 在電擊時請勿迎接此產品或將此產品解除連接。
- 電源線插頭必需迎接適當的電線並插入適當的接地電源插頭。
- 任何要與此產品迎接的設備都必需迎接適當的電線並插入適當的接地電源插頭。
- 如果要切斷螢幕的電源, 請拔出插座上的插頭, 電源插座應該很容易見到。

搬動:
- 我們的彩色螢幕很重, 所以搬動時要很小心。如果重量超過 18 公斤, IBM 建議要兩個人搬動或舉起。
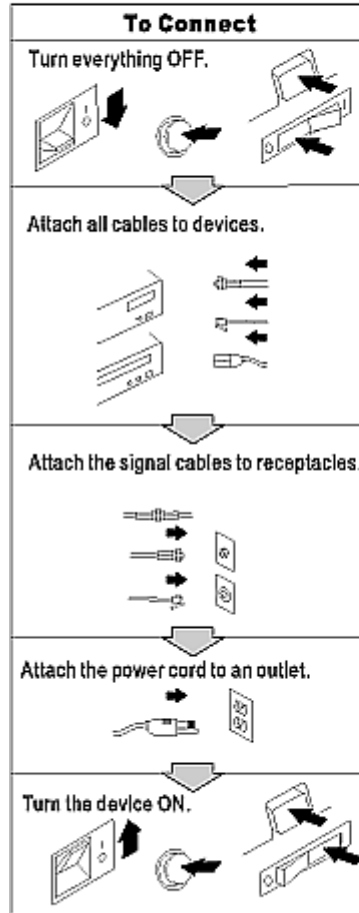

סכנה

כדי למנוע סכנת התחשמלות:

אין להסיר את הכיסה;

אין להפעיל את הצג אלא לאחר חיבור הבסיס בלבד;

אין לחבר או לנתק את הצג לרשת החשמל בעת סופת ברקים;

יש לחבר את כבל הכוח לשקע חשמלי תקני המצויד בהארקה;

מכשיר שמחובר למוצר זה יהיה מחובר אף הוא לשקע חשמלי תקני המצויד בהארקה;

כדי לבודד את הצג ממקור הכוח, יש לנתק את התקע מהשקע החשמלי. יש לדאוג שהשקע החשמלי יהיה נגיש בקלות.

העברת הצג ממקומו:

הצג הצבעוני כבד, ולכן יש לטפל בו בזהירות. אם משקל הצג עולה על 18 ק"ג, מומלץ להעבירו או להרימו בעזרת שני אנשים.

⚠ **DANGER**

Electric current from the power cords, telephone lines and communication cables is hazardous. To avoid shock hazard, connect and disconnect cables as shown below when installing, moving, or opening the covers of this product or attached devices. The power cord must be used with a properly grounded outlet. Connect the power plugs to mains outlets located in the same panel.

To Connect	To Disconnect
Turn everything OFF.	Turn everything OFF.
Attach all cables to devices.	First remove the power cord from the outlet.
Attach the signal cables to receptacles.	Remove signal cables from receptacles.
Attach the power cord to an outlet.	Remove all cables from devices.
Turn the device ON.	
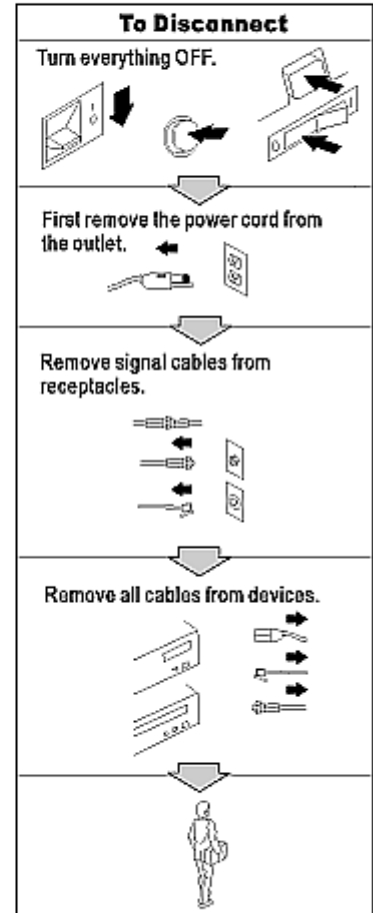
Notices

Attention

- Do not exert strong pressure to the surface of the monitor screen. You may break the LCD panel.
- Do not place heavy objects on top of this product. They may damage the monitor.
- Do not touch the monitor screen with your fingers. Fingerprints and oil stains may remain on the screen surface. They are difficult to wipe off.
- The monitor is heavy. Ask the help of others if you cannot carry it by yourself.
- When leaving your office for a long vacation, always unplug the power cords from the main outlet.

LCD considerations

The liquid crystals in the display panel contain several irritants. If the panel is damaged or broken, do not let the liquid come in contact with your skin, eyes, or mouth. If you do come in contact with the liquid, flush the affected part with running water for at least 15 minutes. If any symptom remains, consult a doctor. The fluorescent lamp in the liquid crystal display (LCD) contains mercury (50 mg. (0.002 oz.) maximum). Do not place in trash that is disposed of in landfills. Dispose of it as required by local ordinances or regulations.

Operating considerations

To ensure comfortable operation of the monitor, follow the instruction below:
- Place the monitor in front of you for easy viewing.
- Place the monitor at a comfortable distance (50 –60 cm) (19 – 24 in.) from you.
- Tilt the monitor so that top of the monitor is at your eye level.
- Adjust the angle of the tilt so that there is no reflection of light and objects. If necessary, turn off the light or lower its luminescence. If near a window, close the curtains or pull down the blind to cut the sunlight.
- Adjust the screen brightness.
- Use a chair with a high-reclining back and sit deep into it.
- Operating on the screen for long hours can cause fatigue and eyestrain. Divert your eyes from the screen for short intervals during operation, and take short rests.

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Contents

Chapter 1. Before setting up

This guide contains information on how to set up and operate the MD22292B 9.2 Million Pixels Ultra Wide View Color LCD Monitor, hereafter called the monitor.

This chapter describes the following:
- Prerequisites
- Unpacking
- Checking parts

Prerequisites

You will need a personal computer or a workstation with the following:

- A DVI-compliant video graphics card.
  To date, ATI®FireGL™4, nVIDIA Quadro®4 900XGL, nVIDIA Quadro®4 980XGL, nVIDIA Quadro®FX-1000, nVIDIA Quadro®FX-2000, nVIDIA Quadro®FX-3000 has been tested to work with the monitor. Refer to http://www.idtech.co.jp for latest information. IDTech is not held responsible for any damage incurred by the installation of unsupported cards.

Unpacking

Attention: The monitor is heavy. Be careful not to drop it. The LCD is fragile and should not be bumped on an edge, or dropped.

Open the carton box and carefully remove the monitor. Hold the bottom of the screen firmly with both hands, as shown.
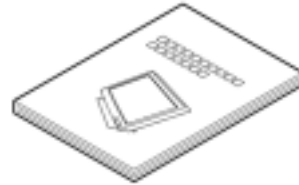
Checking parts

Check the box for the following items. If any items are missing or damaged, contact your place of purchase immediately.
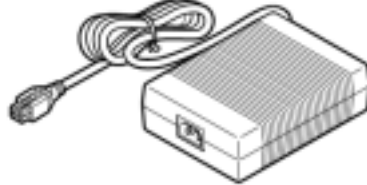
☐ **Monitor**

☐ **User's Guide**
  (This book)

☐ **Connector tool**

☐ **Power adapter and cord**

☐ **Power cord**

☐ **Digital signal cable***

Notes: *The DVI signal cable is shipped already connected to the monitor.

Chapter 2. Hardware setup

This chapter describes the following:
- The location of the controls, switches, and connectors.
- The procedure for setting up the monitor (page 4).

Locations

Front view

Monitor screen

Serial number label

OSD control

Brightness control

Power switch

Base stand

Power light
(Power on/Standby)

Rear view

DC-IN connector

VESA FPMI mounting points (4x)

Video connector

Connector cover

Security keyhole

Stand rear cover

Cable hook   Cable clamp
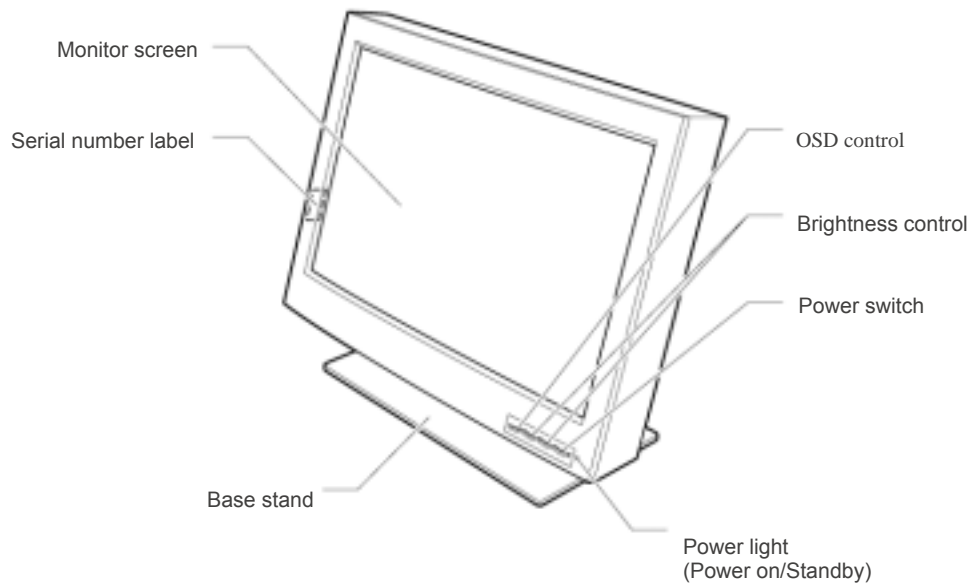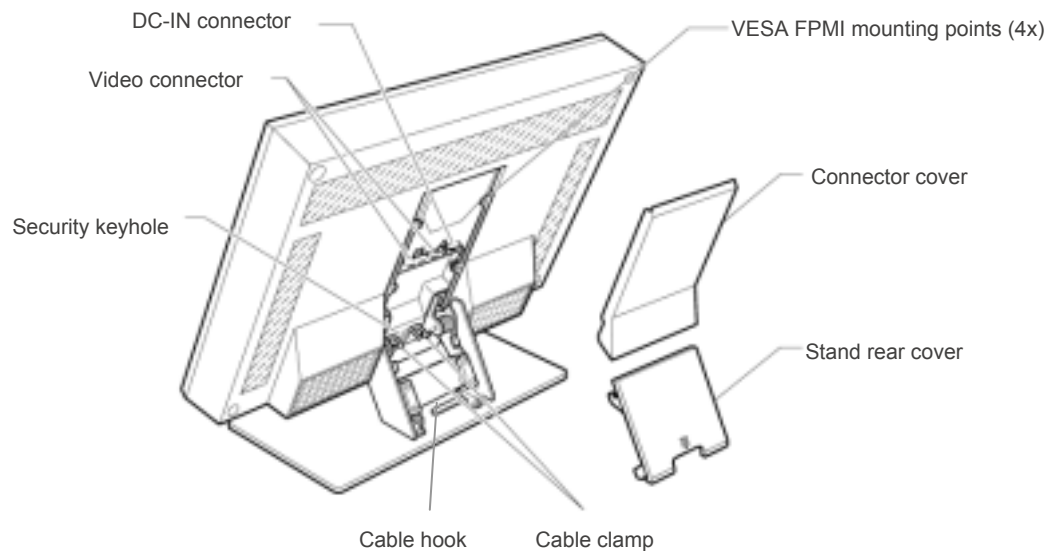
Note: If it is desired to operate the monitor in the portrait position, mount the monitor on a stand meeting the VESA FPMI standard and rotate the monitor clockwise such that the controls are located in the bottom left position.

Hardware setup

Storing the connector tool

This section describes how to store the connector tool for future use. This tool will be useful when disconnecting the cables from the monitor.

To store the connector tool, do the following:
1. Clear a workspace, and turn the monitor face down.

Attention:
a. Support the sides of the monitor, using the original packing pieces.
b. Ensure the area is clear and clean, and there are no objects, which will damage the display.
c. Take care not to pinch your fingers.
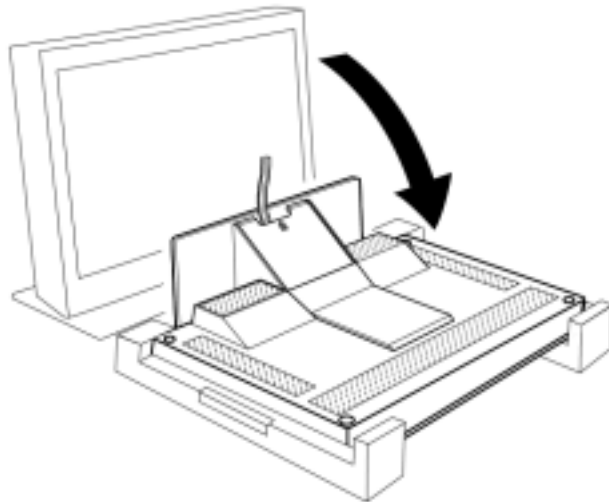
2. Remove the stand rear cover.

Stand rear cover
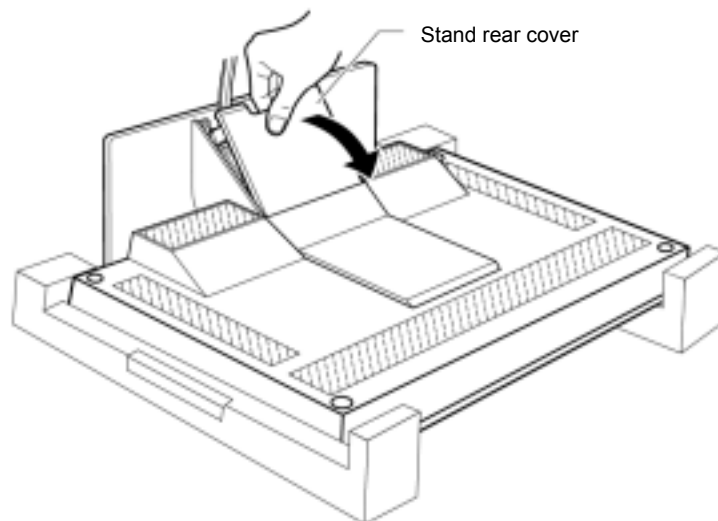
3. Remove the connector cover.
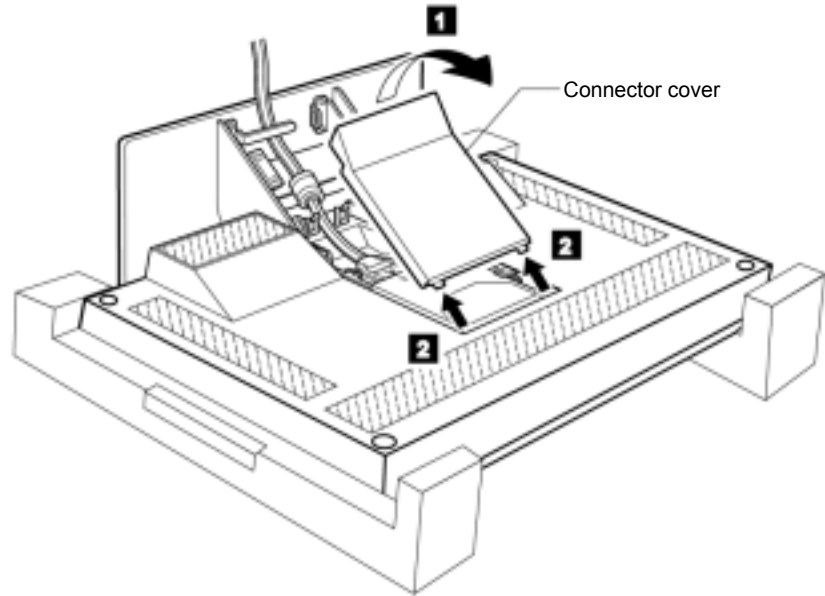
Connector cover

4. Unhook the digital signal cable from the cable hook and lift it up to store the connector tool in the rear compartment of the monitor.

Cable hook   Connector tool
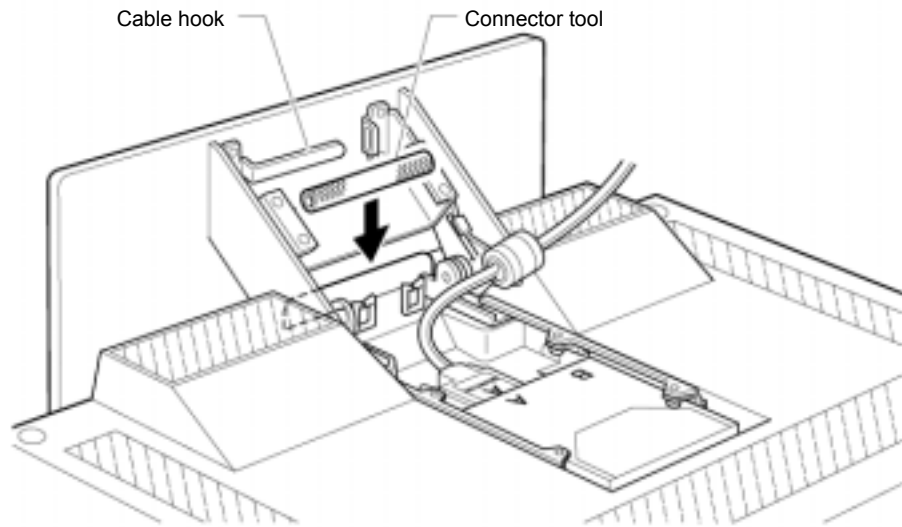
Connecting the cables

This section describes how to connect the following cables:
1. Power adapter cord
2. Digital signal cable
3. Power cord

Connecting the power adapter cord

1. Connect the power adapter cord to the DC-IN connector at the rear of the monitor. Make sure that it clicks firmly into the connector.
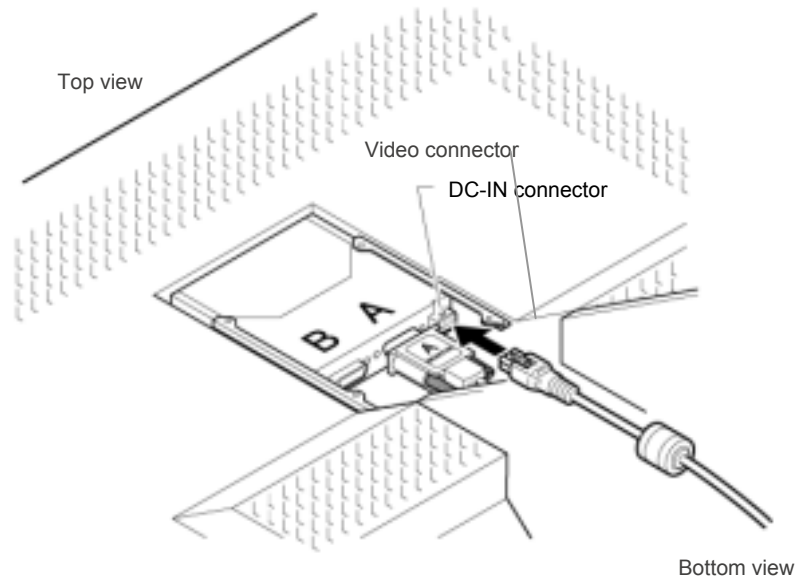
Note: The video connectors A and B on the monitor are Safety Extra Low Voltage (SELV) circuits.

2. Route the cables through the cable clamp and the cable hook.
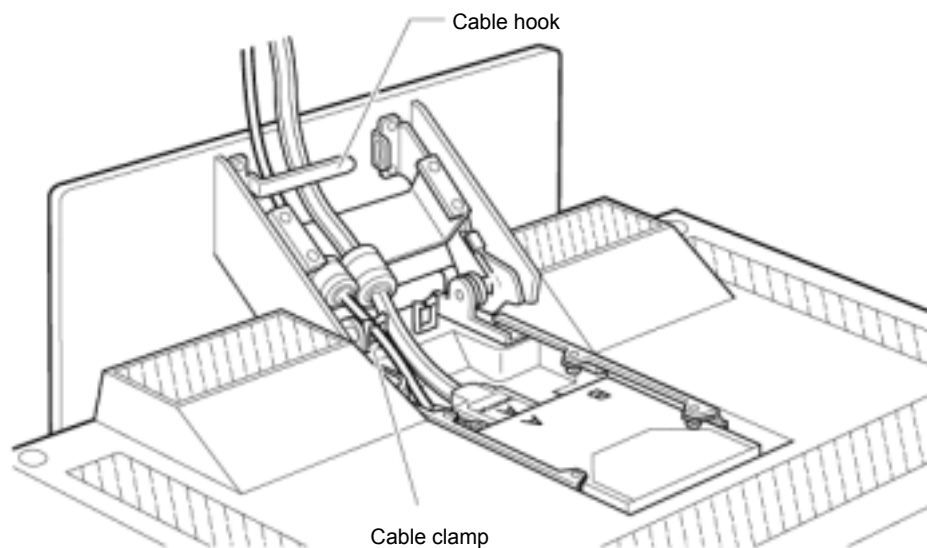
3.   Reinstall the connector cover on the monitor.
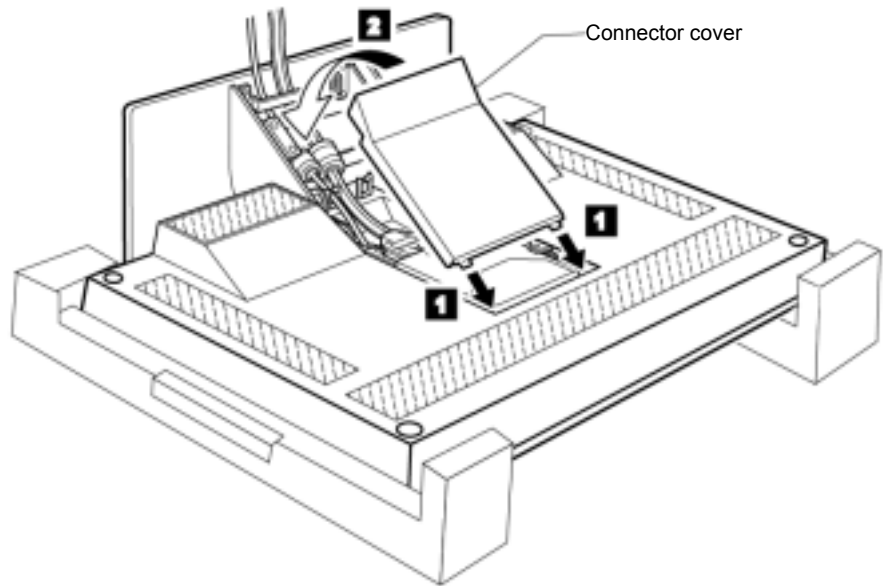
Connector cover

4.   Reinstall the stand rear cover and turn the monitor to the upright position.

Stand rear cover
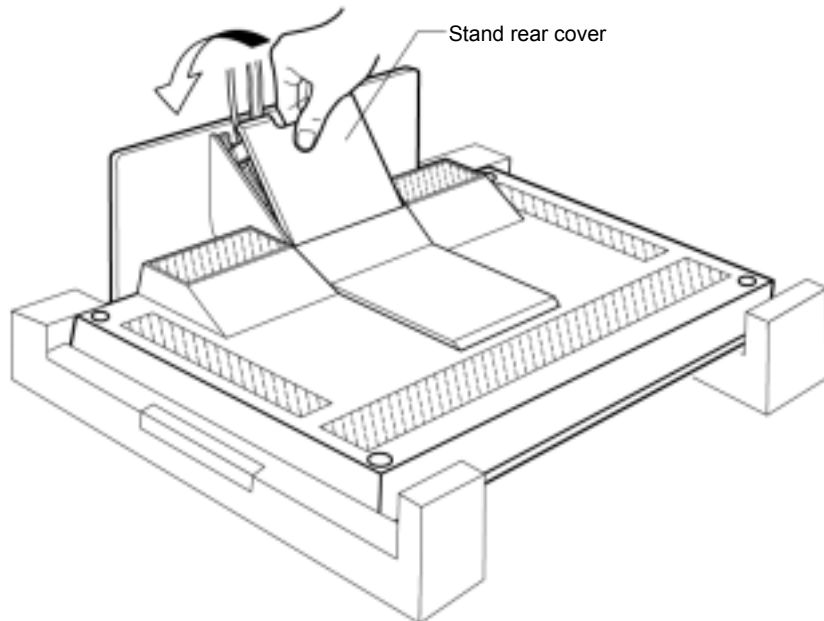
Note: Do not power on the monitor or the personal computer or workstation until instructed. Failure to do so may damage the unit or the video graphics card.

Connecting the digital signal cable

Note: If you use the converter box, see "Converter Box User s Guide".

1. Make sure that the power cord is NOT connected to your PC or workstation.
2. Open the cover of your personal computer or workstation, and install the video graphics card, if necessary.
3. Connect the DVI connector labeled "primary" on the monitor cable to the main DVI output on the video graphics card. The connector labeled "secondary" is connected to the other output*.

   Note: It is not necessary to connect the monitor USB connector. This is only required for updating the monitor firmware or using the color management facility (see http://www.idtech.co.jp for more information).

Video graphics card
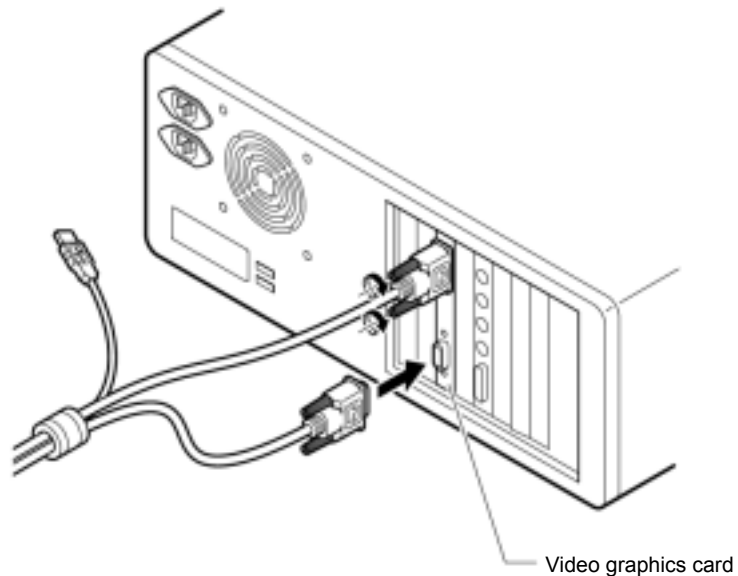
4. If you opened the cover of your personal computer or workstation, close it.

Note: *The monitor can be driven with up to 4x DVI inputs. Refer to Appendix C for more information on configuring your video graphics card & system.

Connecting the power cord

Note: Read the respective Danger Statements on pages iii through xiii before continuing with this section.

1. Connect the power cord to the power adapter.
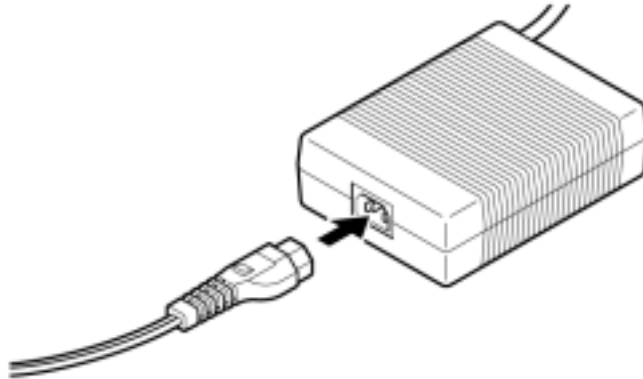
2. Connect the power plug to a properly grounded power outlet.
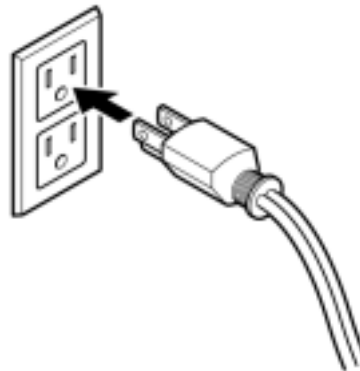
Note: Make sure that all the cables are connected; otherwise the power-on light will not turn on.

3. Connect the personal computer or workstation to a properly grounded power outlet and turn on the power switch.

4. Press the power switch on the monitor. The power light comes on.

Power switch

Power light
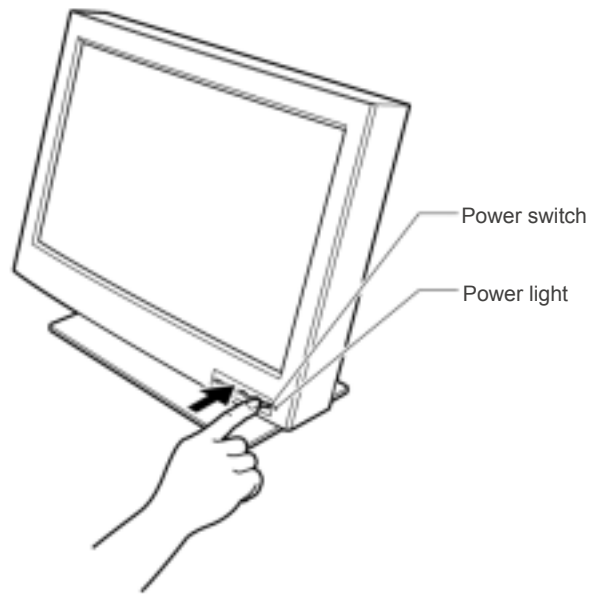
Notes:
a. When you turn off the monitor, wait at least five seconds before turning it on again.
b. If you accidentally disconnected the power cord from the main outlet and you connected it to the outlet again, the screen may flicker continuously. To stop the flicker, press the power switch and turn off the monitor, then turn it on again.
c. Refer to "Checking the operating status of your monitor" on page 16 for more information on the power light.

This completes the hardware setup.

Supplementary Information

When powering on the different units, power them on in the following sequence:

1. Monitor
2. Peripheral units
3. Personal computer or workstation

Chapter 3. Adjusting and maintaining your monitor

This chapter describes the following:
- How to adjust the viewing angle.
- How to set the controls.
- The operating status of your monitor.
- How to disconnect the cables.
- How to use the security key lock.
- How to maintain your monitor.

Adjusting the viewing angle

You can adjust the vertical angle of the monitor to avoid unnecessary light reflection and to make viewing easier. Tilt the screen angle vertically by grasping both sides of the monitor and pulling it forward or backward.
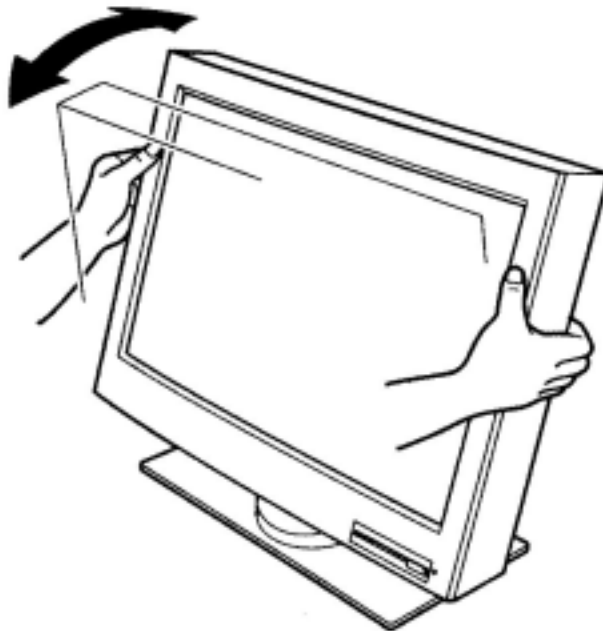
Setting the monitor control buttons

You can control the various functions of the monitor using the buttons at the front right of the monitor.
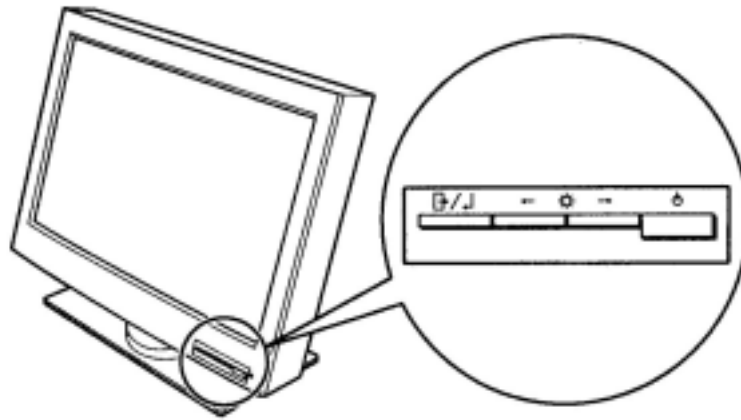
The four buttons control the following functions:

Button/Button Name	Direct access functions	Functions available from the OSD Menu
⊡/⏎ **Menu/Enter**	Displays the on-screen display (OSD) menu.	Enters highlighted menu mode.
← **Left-Arrow**	Lowers the screen brightness.	Moves the cursor to the left for highlighting the icons or for making adjustments.
→ **Right-Arrow**	Increases the screen brightness.	Moves the cursor to the right for highlighting the icons or for making adjustments.
⏻ **On/Off**	Switches the monitor on or off.	

Accessing the on-screen display (OSD) menus

You can access the on-screen display (OSD) menus by pressing the **Menu/Enter** button. The OSD menus enable you to set the various operating conditions of your monitor.
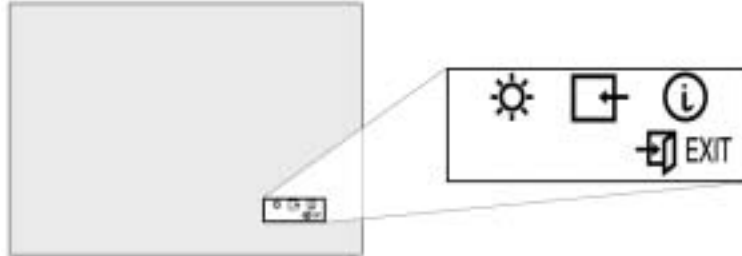
The OSD menus consist of the following:
  Main menu (for menu selection)
  Submenus (for controls setting)
   - Brightness level
   - Video input type (single, 2-Vertical stripes, 4-Vertical stripes, 4-tiles)
   - Display key information (vertical frequency resolution)

Main menu

To access the Main menu, press the **Menu/Enter** button. The Main menu appears on the display screen.
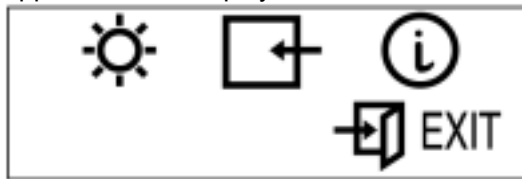
OSD Icon	Description
	Used to display the Brightness submenu.
	Used to display the Video Input submenu.
	Used to display the Information submenu.
	Exit from the Main menu.

To exit the Main menu, select the **Exit** icon using the **Left-Arrow** or the **Right-Arrow** button, then press the **Menu/Enter** button.

To reset the OSD settings to the default value, do the following:
1. Power off the monitor.
2. While pressing the **Menu/Enter** button, press the Power switch to on.
    The Power light changes cyclically between green and amber for several seconds. And the screen remains blank before the default settings are restored.
     Note: This does NOT reset any changes to the EDID settings.

Submenus

To access a submenu, do the following:

Brightness ☼ **submenu**

1. Select the **Brightness** icon on the Main menu using the **Left-Arrow** or the **Right-Arrow** button

2. Press the **Menu/Enter** button. The Brightness submenu appears.

☼ 15
||||||||||||||||·····

3. Adjust the brightness using the **Left-Arrow** or the **Right-Arrow** button.

4. Press the **Menu/Enter** button to exit from this submenu.

Video input ⊞ **submenu**

1. Select the **Video Input** icon on the Main menu using the **Left-Arrow** or the **Right-Arrow** button.

2. Press the **Menu/Enter** button. The Video Input submenu appears.

□ ⊞ ⊞ ⊞
1 0 ↵ EXIT

OSD Screen	Description
□	The monitor has detected a single video input signal*
⊞	The monitor has detected two video input signals*
⊞	The monitor has detected four video input signals, with timings appropriate to a four strip mode*
⊞	The monitor has detected four video input signals, with timings appropriate to a "four tile mode"
Numeric (Left)	Only applicable when a single video input is used, color management is always enabled when multiple video input signals are used. 0: Disables color management, and image smoothing is applied in low resolution modes. 1: Enables color management. (Default)
Numeric (Right)	When the Color management mode is enabled, 0: Initial Setting Parameters are used. (Default) 1: Parameters set by User are used for the conversion table for Color Management.
↵ EXIT	Exit from the Submenu.

3. Press the **Left-Arrow** button for at least 3 seconds to disable or enable the color management mode when a single video input is being used
4. Press the Menu/Enter button to exit from this submenu.

Note: * The monitor automatically detects the number of video inputs and timings. The OSD doesn't provide a manual override.

Information ⓘ submenu

1. Select the **Information** icon on the Main menu using the **Left-Arrow** or the **Right-Arrow** button, to check the vertical frequency and the resolution of your monitor
2. Press the **Menu/Enter** button. The Information submenu appears.

ⓘ   60Hz
1600x1200

3. Press the **Menu/Enter** button to exit from this submenu.

Checking the operating status of your monitor

You can check the status of your monitor by the color of the power light.

Power switch
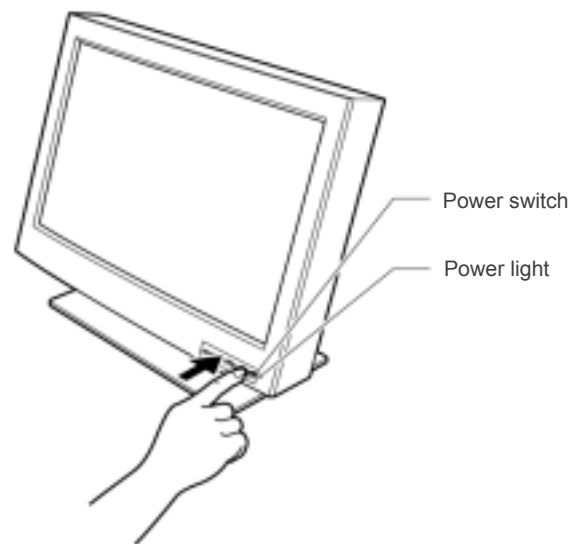
Power light

The color of the power light changes from green to amber when your monitor receives a time-out video signal from the personal computer or workstation and enters Standby mode to save power. A time-out video signal is sent from your personal computer or workstation to the monitor when the former detects inactivity on the keyboard or mouse for a set duration of time. You can change the time-out duration for your monitor from the personal computer or workstation. Refer to the manual shipped with your personal computer or workstation to change the time-out duration value.

Color	Mode	Power Consumption	Description
Green	Normal	150 W (Maximum)	The monitor is operating normally and is receiving a correct video signal from the personal computer or workstation.
Amber	Standby Mode	Less than 5 W	Either: - the monitor is in Standby mode to save power, or - the video cable is disconnected. If the monitor is in Standby mode, it is not receiving any video signals from the personal computer or workstation. If the video cable is disconnected, refer to "Chapter 4. Troubleshooting" on page 19.
Amber (fast blinking at 0.25-sec. intervals)	-	-	An internal monitor fault has occurred. Refer to "Chapter 4. Troubleshooting" on page 19.
Amber (slow blinking at 1-sec. intervals)	-	-	The monitor does not support the incoming video signal.

Disconnecting the cables

Note: Before you begin the procedures below, be sure to read the Danger Statements on page iii.

To disconnect the digital signal cable, do the following:
1. Power off your monitor, peripheral units (if any), and personal computer or workstation and unplug them from the power outlet.
2. Turn the monitor face down (refer to page 4).
3. Remove the stand rear cover and the connector cover (refer to page 4 and 5).
4. Unhook the cables from the cable clamps and cable hook (refer to page 5).
5. Lift up the cables and take out the connector tool from the rear compartment of the monitor (refer to page 5).
6. Disconnect the power adapter cord from the DC-IN connector (refer to page 6).

   Note: Be sure to press the latch on the connector of the power adapter cord when unplugging it from the DC-IN connector.

7. Insert the connector tool into the thumb screw on the digital signal cable connector A **1** and turn it counterclockwise **2** to loosen the screw.
8. Disconnect the digital signal cable A from video connector A **3** .
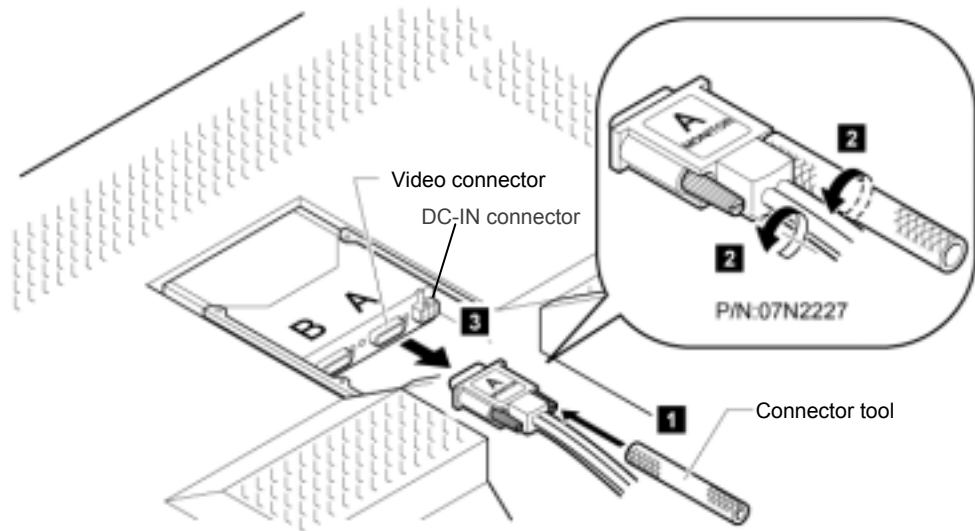
Note: The video connectors A and B on the monitor are Safety Extra Low Voltage (SELV) circuits.

9. Store the connector tool back into the rear compartment of the monitor.

Using the security key lock

The monitor has a built-in security keyhole at the rear of the screen for fastening a security lock and cable. This lock is used to help prevent the monitor from being removed without your permission. This cable can be purchased at any PC shop.

First secure the cable to a stationary object; then attach the lock to the keyhole on the rear of the monitor. For details of the installation, refer to the instructions shipped with the security key lock.

Also, refer to "Rear view" on page 3 for the location of the keyhole.
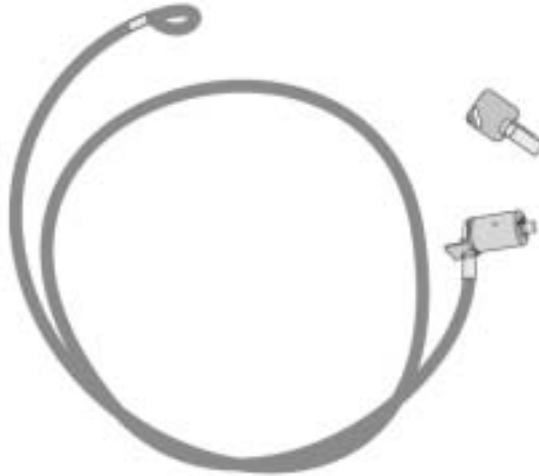
Note: You are responsible for evaluating, selecting, and implementing the lock. IDTech makes no comments, judgments, or warranties about the function, quality, or performance of the lock.

Maintaining your monitor

Before cleaning or performing any maintenance operation on your monitor, be sure to turn off the power on your monitor and personal computer or workstation.

- Gently wipe the monitor surface and the cover with a soft, clean cloth.
- Do not use such flammable chemicals such as alcohol, thinner, or petroleum-based solvents; they will cause a fire hazard and may also damage the screen coating.

Chapter 4. Troubleshooting

Is something wrong?

If you suspect something is not working correctly, you should:
1. Turn on the computer and monitor.

2. Set the brightness control (☼) to the proper position.
3. Make sure that all cables are securely connected.
4. Disable the computer's screen saver program if it is enabled.
5. Set the display mode to a supported display mode.

6. If you still have trouble, go to the symptom list below and find the symptom that most resembles yours.

Symptom list

Before calling your retailer or IDTech, find the symptom that most resembles yours, and try the suggested action. You may be able to solve the problem yourself.

Symptom	Possible cause	Suggested action
Screen is blank and power indicator is off	No power to the monitor	No power to the monitor the monitor are both switched on. Check that the power cord is firmly plugged into the electrical outlet and the power supply unit. If the power cord plug has a removable fuse, replace it. Try another power cord. Try another electrical outlet.
Screen is blank and power indicator is steady green	Brightness may be too low	Adjust the brightness
Screen is blank and power indicator is steady amber	The monitor is in Standby mode	Press any key on the keyboard or move the mouse to restore operation.
	The video cable is not connected	Check that the signal cable is firmly connected. Check that no pins are bent in the signal cable connector.
Screen is blank and power indicator is blinking amber every second	The display mode of the computer is outside the range of the monitor	Reconfigure the computer to use a supported display mode.
Screen is blank and power indicator is blinking amber every 0.25 second	An internal monitor fault has occurred	Check that the power cord is firmly plugged into the electrical outlet. Ensure that the power adapter cord is firmly connected. If the symptom remains, call your retailer or IDTech.
Image appears to be smeared	There is noise in the video signal	Check that the signal cable is firmly connected. Check that no pins are bent in the signal cable connector.
A few pixels are missing, discolored, or inappropriately lit	The LCD contains over 27,000,000 thin-film transistors (TFTs). A few may fail causing pixels to be missing, discolored or lit. This is an intrinsic characteristic of TFT LCD technology and is not a defect.	

Warranty information

Machine Name: **MD22292B 9.2 Million Pixels Ultra Wide View Color TFT Monitor**

Warranty Period: **One (1) Year**

Service and support

Call: IDTech Customer Support Line in Japan

81-46-215-4445

9:00-17:00 at Japan Mean Time

e-mail address: supportdesk@idtech.co.jp

Before calling, please available as much of the following information as possible.

1. Type, model, and serial number from the label on the back of your monitor.
2. Purchase receipt
3. Description of problem
4. Computer type and model
5. System configuration (hardware attached, etc.)
6. System BIOS version number
7. Operating system and version number
8. Display driver version number

Appendix A. Specifications

The specifications of the monitor are as follows:

Maximum addressability	Horizontal: Vertical:	3840 pixels 2400 pixels
Size (viewable image area)	Diagonal	564 mm (22.2")
Active display area	Horizontal: Vertical:	478 mm (18.7") 299 mm (11.8")
Brightness		235 cd/m$_2$ typical
Contrast		400 : 1 typical
Dimensions	Width: Height: Depth:	547 mm (21.5 in.) 437 mm (17.3 in.) 196 mm (7.7 in.)
Weight	Unpackaged:	With base stand: 11.4 kg (25.1 lb.) Without stand: 8.8kg (19.4 lb.) Power adapter: 1.3 kg (2.9 lb.)
Tilt	Angle:	-5° ~ +30°
Power	Input:	100 – 240 V AC, 50/60 Hz
Power consumption	Maximum: Minimum:	150 W Less than 5 W (In Standby Mode)
Video input		DVI^{TM} signal interface using supplied cables (RGB: 8 bits)
User controls		Power On/Off, Brightness
Regulatory compliance	• AN/NZS 3548 • CISPR22 A • FCC-A • IEC 60950 3rd Ed. • UL 60950 3rd Ed./CSA C22.2 No. 60950-00 • VCCI-A • ISO 13406-2 • TCO'95 • (CE Mark)	
Image Formation Time	62 ms (measured according to ISO 13406-2)	
Temperature	Operating: Shipping (by Air & within 24 Hours): Shipping (other than above)/Storage:	0 ~ 35°C -20 ~ 60°C 1 ~ 60°C
Relative humidity	Operating: Shipping (by Air & within 24 Hours): Shipping (other than above)/Storage:	8 ~ 80 % (and No Condensation) 8 ~ 80 % (and No Condensation) 8 ~ 80 % (and No Condensation)

Recommended configuration

The following pages contain comprehensive details of the MD22292's capability and attachment options. The majority of applications can be addressed by the configurations shown below.

Image motion characteristic	Typical Applications		Minimum Screen Update Rate	MD22292			Supported Graphics Card (NVIDIA)
				Model	EDID	Firmware level	
Primarily static ↕ Smooth & life-like	2D	Office Applications Publishing Virtual Galleries & Museums Digital Photography	13Hz	B2/5	29	B2 – 4.4 B5 – 4.5	980XGL FX1000
	3D	Engineering & Modeling	20Hz	B2/5	29		980XGL FX1000
			24Hz	B5	02		FX2000 FX3000
	Video	Image analysis (roaming, windowing, leveling) Video Creation	48Hz	B5	06		FX3000

Supported display modes

All versions of the monitor support the following modes.

1) Industry & standard modes

Addressability		DVI Input	Horizontal Frequency (kHz)	Vertical Frequency (Hz)	Pixel Clock Frequency (MHz)	Mode Scale Factor	Actual Display Resolution
VGA	640x400	ch1	31.5	70.0	25.2	5	3200x2000
	640x480	ch1	31.5	59.9	25.2	5	3200x2400
	640x480	ch1	37.9	72.8	31.5	5	3200x2400
	640x480	ch1	37.5	75.0	31.5	5	3200x2400
	640x480	ch1	43.3	85.0	36.0	5	3200x2400
SVGA	800x600	ch1	35.2	56.3	36.0	4	3200x2400
	800x600	ch1	37.9	60.3	40.0	4	3200x2400
	800x600	ch1	48.1	72.2	50.0	4	3200x2400
	800x600	ch1	46.9	75.0	49.5	4	3200x2400
	800x600	ch1	53.7	85.1	56.3	4	3200x2400
Stripe VGA*	960x1200	ch1	67.3	55.7	71.0	2	1920x2400
XGA	1024x768	ch1	48.4	60.0	65.0	3	3072x2304
	1024x768	ch1	56.5	70.1	75.0	3	3072x2304
	1024x768	ch1	60.0	75.0	78.8	3	3072x2304
	1024x768	ch1	68.7	85.0	94.5	3	3072x2304
SXGA	1280x1024	ch1	64.0	60.0	108.0	2	2560x2048
	1280x1024	ch1	80.0	75.0	135.0	2	2560x2048
UXGA	1600x1200	ch1	75.0	60.0	162.0	2	3200x2400
UXGA-Wide	1920x1200	ch1	50.0	40.9	127.2	2	3200x2400
	1920x1200	ch1	74.1	60.0	154.1	2	3200x2400
	1920x1200	ch1	59.2	48.0	151.6	2	3200x2400

Note: *This mode is for compatibility with the MD22282 Model B1

2) Extended modes

The addressability of the monitor is more advanced than those provided for in the industry standard display modes so in addition, monitor specific, or extended modes, have been developed. Detailed timing information on these modes is provided to the video graphics card and system through the VESA DDC/EDID protocol. Depending on the application requirements and the capability of the video graphics card, it may be necessary to select an alternative EDID and configure the graphics card so that the optimum mode is enabled (see also Appendix B & C).

Addressability (QUXGA-W)	DVI Input	H Freq. (kHz)	V Freq. (Hz)	Pixel Clock (MHz)	EDID**												
(960x2400)x4	ch1 ~ 4	99.2	40.9	104.8				P1	P4								
(1920x1200)x4	ch1 ~ 4	50.1	40.9	104.8												P1	
(1920x1200)x4	ch1 ~ 4	50.3	40.9	127.2						P3	P2	P2	P2				
(1920x1200)x4	ch1 ~ 4	58.9	48.0	122.5	P2	P2	P4			P3				P2	P2		P1
(1920x2400)x2	ch1 ~ 2	48.8	20.1	123.4						P3							
(1920x2400)x2	ch1 ~ 2	58.4	24.0	149.5								P3					
(1920x2400)x2	ch1 ~ 2	58.2	24.0	121.0										P3			
(1920x2400)x2	ch1 ~ 2	60.9	25.0	155.8									P3				
(1920x2400)x2	ch1 ~ 2	60.7	25.0	126.3											P3		
3840x2400	ch1	30.7	12.7	148.0							P1	P1	P1				
3840x2400	ch1	29.2	12.1	116.8			P1		P1	P1				P1	P1		
3840x2400	ch1* (d)	58.2	24.0	233.0	P1												
3840x2400	ch1* (d)	60.7	25.0	243.0		P1											
2624x2400	ch1* (d)	117.8	48.0	328.0			P2										
1216x2400	ch3	117.8	48.0	162.0			P3										
(960x2400)x4	ch1 ~ 4	90.2	48.0	123.0						P4							
(1920x2400)x2	ch1 ~ 2	48.3	20.1	98.5					P2								
(1920x2400)x2	ch1 ~ 2	58.0	24.0	118.3						P2							
B2/5 — Factory default setting — Single input (13Hz), twin input (20Hz) & quad input (tile - 41Hz) modes											29						
B2/5 — B1 compatible (enhanced), Single input (12Hz), twin input (20Hz), quad input (tile-41Hz), quad input (stripe - 41Hz)										21							
B2 only — B1 compatibility, quad input (stripe - 41Hz)								20									
B2 only — As default except twin input (24Hz) mode timing													34				
B2 only — As default except twin input (25Hz) mode timing														35			
B5 only — Single input (24Hz)*, quad input (tile - 48Hz)					02												
B5 only — Single input (25Hz)*, quad input (tile - 48Hz)						03											
B5 only — Single input (12Hz), quad input (tile - 48Hz) & twin input (24Hz)												36					
B5 only — Single input (12Hz), quad input (tile - 48Hz) & twin input (25Hz)													37				
B5 only — Quad tile – 41Hz													44				
B5 only — Quad tile – 48Hz														45			
B5 only — Single input (12Hz), twin input (48Hz)*, & quad input (tile-48Hz)							06										
B5 only — Single input (12Hz), twin input (24Hz), quad input (tile - 48Hz), quad input (stripe - 48Hz)										22							

Notes:

* Requires dual-link DVI converter box

**Each EDID contains up to four extended timings, the number (P1 - P4) in the top section of the table indicates the order & priority of these timings within the EDID. The selectable EDID number for each configuration is shown in the bottom section of the table.

3)   Basic timing requirements

In general, the monitor supports any modes that comply with the following limits:

        Vertical frequency   : 13 - 85Hz
        Horizontal frequency : 31 - 118kHz
        DVI video clock   : max. 165MHz (single link, per channel)

Appendix B. Updating the settings for your monitor

Introduction

Modern monitors internally store data on their performance characteristics and capabilities in an abbreviated format. The information is called the monitor Extended Display Identification Data or EDID and is read by operating systems and video graphics cards to determine the optimum display properties for the system. The IDTech MD22292B is a very advanced and flexible monitor and it exceeds the capability of the EDID system to describe it fully. A special OSD menu allows alternate EDIDs to be selected that are more suitable for certain graphics cards. Unless you change the video graphics card that drives your monitor, there is usually no need to change the EDID settings. The EDID update procedure must be done carefully. If an incorrect EDID is selected, it is possible that the monitor may not display any images afterwards.

Applicable model: All models with the following firmware level

The procedure given in this document applies to monitors with firmware at the following levels:

DDC CPU   Version 3.2 or higher
OSD CPU   Version 5.0 or higher
USB CPU   Version 4.0 or higher
FPGA LOGIC   Version 34 or higher

To check each version, see the next page. If you need to change the settings on a monitor that has firmware at a lower level, refer to the IDTech technical website for MD22292B monitor.

1. Setting

a. Connect the monitor to the desired graphics card and / or computer system
b. Turn on the monitor and the computer. PC. Wait until the system has completed loading and a stable screen image is displayed. Confirm that the power indicator on the monitor shows green. If there is no image is displayed and the power indicator shows steady amber, press the Debug switch to turn on the monitor (see the following figure), the power indicator will show blinking amber. The video image from the computer will not appear but the screen will display a sequence of test patterns.

Debug switch
(inside of the
bottom cover)

Bottom view
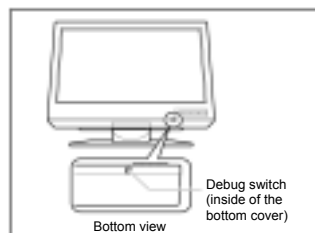
CAUTION:

Do not use conductive material to press this switch. It may damage the electric circuit inside of the monitor.

2. Enabling the special OSD (on-screen display) menu

a. Press the leftmost OSD button (select / enter) and navigate to the (i) (information) icon by using the '←' (navigate left) or '→' (navigate right) button. Press the 'select / enter' button to access the information screen. The refresh rate and screen resolution will be displayed, as in this example:

```
 ⓘ  60Hz
1600X1200
```

b. Press the 'navigate left' button three times, and then press the 'navigate right' button three times. The special OSD menu will be display, as in this example:

```
-1-  3.2  5.0
 2  005  034
```
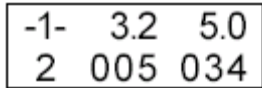
In this display, the firmware version is shown in the following format:

```
-1-      aaa      bbb
  c      ddd      eee
```

where

aaa:	DDC-CPU version
bbb:	OSD-CPU version
c:	Reserved
ddd:	USB-CPU version
eee:	FPGA-LOGIC version

If the special OSD menu does not appear, press the 'select/enter' button to exit from the OSD menu. and try again from step 2a.

3. Checking the current settings

a. In the special OSD menu, press the 'navigate left' or 'navigate right' button to show panel 2 of the special OCD menu.

b. In about five seconds, the current EDID settings will be displayed, as in this example:

```
-2-  020
```
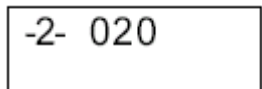
If the EDID setting is given as 000, or any number greater than 63, or a value ending in 'x', an error has occurred; repeat step 3 to try again. For details, see "Valid setting".

4. Changing the settings

a. From the table in the 'valid setting' section, select the number of the setting you want to use.

b. Set the brightness level to the number for the EDID setting you have chosen (see user's guide), you can choose values from 0 to 20. For higher number, firstly enable the special OSD menu and then exit it by

using the 'select / enter' button. The brightness range will now extend from 0 to 63, as in this example:
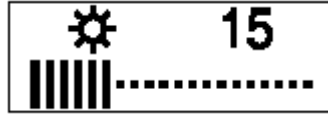
c. Navigate back to the first panel of special OSD menu.
d. Press the 'navigate left' or 'navigate right' button to show panel 2. Then press both 'navigate button together, and hold them down until three dots appear on the display. The three dots show that the EDID setting is in the process of being updated.

e. Within about five seconds, the number of the new EDID setting stored in the monitor will be displayed. If it is not the setting number you want, try again.

   Note: An attempt to enter an unsupported setting number will fail. If the setting number ends in 'x', the update procedure has failed.

f. Turn off the monitor to disable the special OSD menu and return to normal operation.
g. Reboot the PC to transmit the EDID setting to the graphics card. Turn off the monitor to disable the special OSD menu and return to normal

Important notices

If the monitor is connected to a powered-off computer system, or if the screen resolution is changed, it will not be possible to program a new EDID setting.

The EDID setting cannot be reset to the original number as for the factory default values by the procedure given in this manual. To reset the EDID to an equivalent value to the factory default, check your MD22292B model and choose the appropriate number as below, then update the setting.

MD22292B2/B5: Setting number 29

Valid Settings

The DDC-CPU firmware that performs the EDID setting process within the monitor can only detect and update certain types of EDID setting. If it encounters a setting it does not recognize, it shows 000 (unknown).

Choose the EDID setting that is appropriate for the operating system and video graphics card you are using.

If you need to use an EDID setting not listed in the table, you will need to upgrade to a later version of DDC-CPU.

EDID settings may be updated without notice. For the latest information, refer to the IDTech technical support website for the MD22292B monitor.

EDID setting numbers and DDC-CPU versions

EDID number	Version of DDC- CPU													
	3.2	3.3	3.4	3.5	3.6	3.8	3.9	4.0	4.1	4.2	4.3	4.4	4.5	4.6
02	-	-	-	-	-	O	-	-	O	O	O	-	O	-
03	-	-	-	-	-	-	-	-	O	O	O	-	O	-
06	-	-	-	-	-	-	-	-	-	-	-	-	O	-
20	O	O	O	O	O	O	O	O	O	O	O	O	-	O
21	-	-	-	-	-	-	-	-	-	-	-	O	O	O
22	-	-	-	-	-	-	-	-	-	-	-	-	O	-
29	O	O	O	O	O	O	O	O	O	O	O	O	O	O
34	-	-	O	O	O	O	O	O	O	O	-	O	-	O
35	-	-	O	O	O	O	O	O	O	O	-	O	-	O
36	-	-	-	-	-	-	-	-	-	-	O	-	O	-
37	-	-	-	-	-	-	-	-	-	-	O	-	O	-
44	-	-	-	-	-	O	O	O	O	O	O	-	O	-
45	-	-	-	-	-	O	O	O	O	O	O	-	O	-

O: the EDID number is supported by the DDC-CPU version.

- :   the EDID number is not supported by the DDC-CPU version.

Appendix C. Configuring your video graphics card

There are several aspects of video graphics card performance that have to be considered when configuring them for use with this monitor.

The latest information on certified graphics cards for this monitor is available on the following web page, including any device driver and video BIOS updates if required.

http://www.idtech.co.jp

Video graphics cards which support this monitor as of the publication date are listed below. Though a video graphics card may be listed here, not all of its functions may be supported.

Video graphics card	Supported EDID's
ATI® FireGL4 3D Labs Wildcat® 6110/ 6210(*) 3D Labs Wildcat® 7110/7210(*) nVIDIA Quadro® 4 900XGL / 980XGL nVIDIA Quadro® FX-1000 nVIDIA Quadro® FX-2000 nVIDIA Quadro® FX-3000	29, 34, 35, 44, and 45
nVIDIA Quadro® FX-2000 nVIDIA Quadro® FX-3000	02 and 03.
(*) Support a maximum addressability of 3840x2160 only.	

Appendix D. Field Replaceable Units (FRUs)
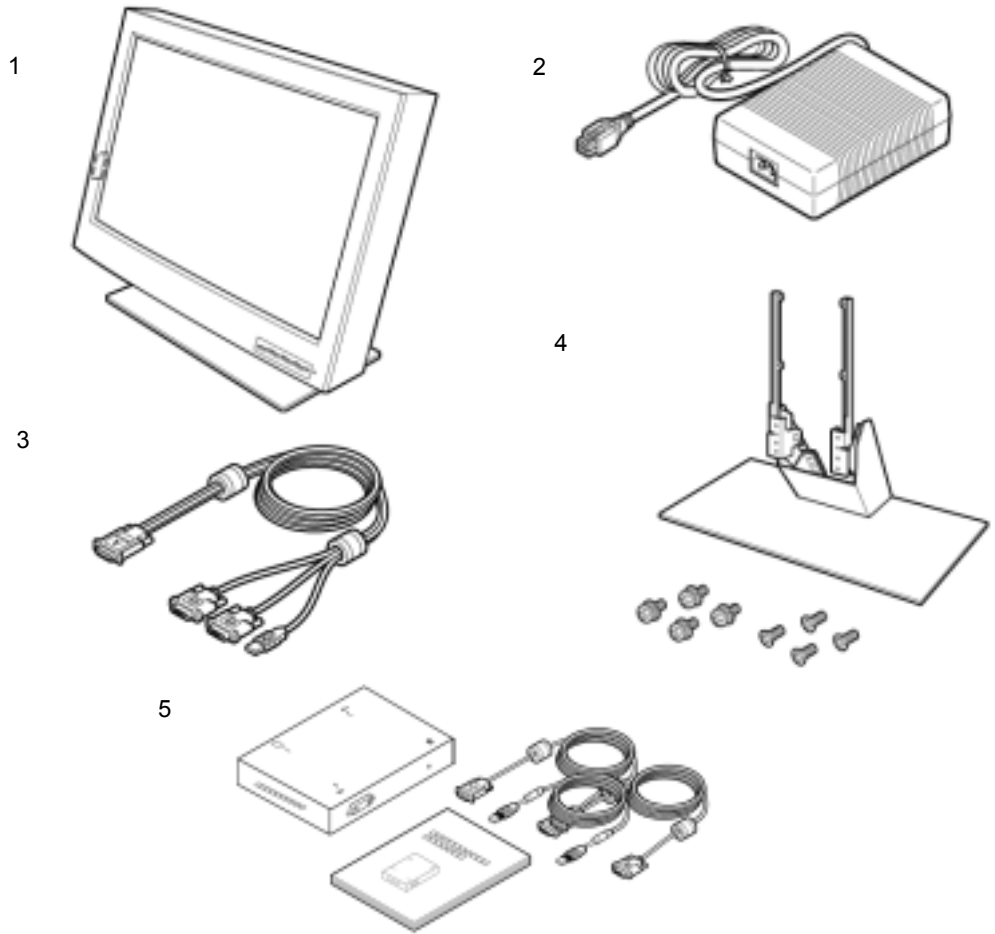
No	FRU		FRU part number	Part number
1	Monitor	MD22292-B2	55P5710	07N2237
		MD22292-B5	13M3240	13M3241
2	Power adapter		55P5077	U1610X3
3	Digital signal cables for DVI		55P2997	07N2227
4	Base stand		07N2196	07N1183
5	Converter box set		28R8117	28R8118

FRUs for withdrawn model
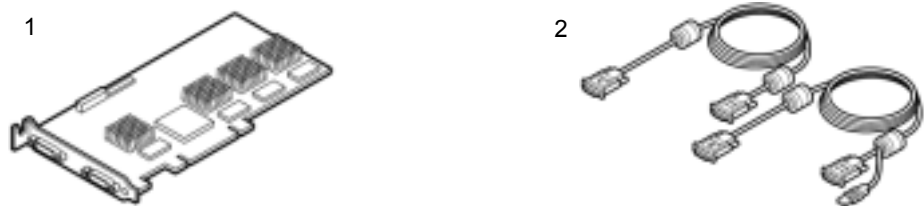
No	FRU	FRU part number	Part number
1	Matrox video graphics card	07N1244	07N1241
2	Digital signal cable for Matrox (Do not use for other equipment than MD22292B and Matrox G200MMS video card.)	07N1246	07N1218 07N1219

Appendix E. Compliance

TCO'95

Congratulations! You have just purchased a TCO'95 approved and labeled product! Your choice has provided you with a product developed for professional use. Your purchase has also contributed to reducing the burden on the environment and also, to the further development of environmentally adapted electronics products.

Why do we have environmentally labeled computers?

In many countries, environmental labeling has become an established method for encouraging the adaptation of goods and services to the environment. The main problem, as far as computers and other electronics equipment are concerned, is that environmentally harmful substances are used both in the products and during the manufacturing. Since it has not been possible for the majority of electronics equipment to be recycled in a satisfactory way, most of these potentially damaging substances sooner or later enter Nature.

There are also other characteristics of a computer, such as energy consumption levels, that are important from the viewpoints of both the work (internal) and natural (external) environments. Since all methods of conventional electricity generation have a negative effect on the environment (acidic and climate-influencing emissions, radioactive waste, etc.), it is vital to conserve energy. Electronics equipment in offices consume an enormous amount of energy since they are often left running continuously.

What does labeling involve?

This product meets the requirements for the TCO'95 scheme which provides for international and environmental labeling of personal computers. The labeling scheme was developed as a joint effort by the TCO (The Swedish Confederation of Professional Employees), Naturskyddsforeningen (The Swedish Society for Nature Conservation) and NUTEK (The National Board for Industrial and Technical Development in Sweden).

The requirements cover a wide range of issues: environment, ergonomics, usability, emission of electrical and magnetic fields, energy consumption and electrical and fire safety.

The environmental demands concern restrictions on the presence and use of heavy metals, brominated and chlorinated flame retardants, CFCs (freons) and chlorinated solvents, among other things. The product must be prepared for recycling and the manufacturer is obliged to have an

environmental plan which must be adhered to in each country where the company implements its operational policy.

The energy requirements include a demand that the computer and/or display, after a certain period of inactivity, shall reduce its power consumption to a lower level in one or more stages. The length of time to reactivate the computer shall be reasonable for the user.

Labeled products must meet strict environmental demands, for example, in respect of the reduction of electric and magnetic fields, physical and visual ergonomics and good usability.

On the back page of this folder, you will find a brief summary of the environmental requirements met by this product. The complete environmental criteria document may be ordered from:

TCO Development Unit

114 94 Stockholm
Sweden

Fax: +46 8 782 92 07
Email (Internet): development@tco.se

Current information regarding TCO'95 approved and labeled products may also be obtained via the Internet, using the address:
http://www.tco-info.com/

TCO'95 is a co-operative project between **TCO** (The Swedish Confederation of Professional Employees), **Naturskyddsforeningen** (The Swedish Society for Nature Conservation) and **NUTEK** (The National Board for Industrial and Technical Development in Sweden).

Environmental Requirements

Brominated flame retardants

Brominated flame retardants are present in printed circuit boards, cables, wires, casings and housings. In turn, they delay the spread of fire. Up to thirty percent of the plastic in a computer casing can consist of flame retardant substances. These are related to another group of environmental toxins, PCBs, which are suspected to give rise to similar harm, including reproductive damage in fisheating birds and mammals, due to the bio-accumulative*
processes. Flame retardants have been found in human blood and researchers fear that disturbances in foetus development may occur.
TCO'95 demand requires that plastic components weighing more than 25 grams must not contain organically bound chlorine and bromine.

Lead**

Lead can be found in picture tubes, display screens, solders and capacitors. Lead damages the nervous system and in higher doses, causes lead poisoning.

TCO'95 requirement permits the inclusion of lead since no replacement has yet been developed.

Cadmium**

Cadmium is present in rechargeable batteries and in the colour-generating layers of certain computer displays. Cadmium damages the nervous

* Bio-accumulative is defined as substances that accumulate within living organisms
** Lead, Cadmium and Mercury are heavy metals which are Bio-accumulative.

System and is toxic in high doses.
  TCO'95 requirement states that batteries may not contain more than 25 ppm (parts per million) of cadmium. The colour-generating layers of display screens must not contain any cadmium.

Mercury**

Mercury is sometimes found in batteries, relays and switches. Mercury damages the nervous system and is toxic in high doses.
TCO'95 requirement states that batteries may not contain more than 25 ppm (parts per million) of mercury. It also demands that no mercury is present in any of the electrical or electronics components concerned with the display unit. Mercury is, for the time being permitted in the back light system of flat panel monitors, as there today is no commercially available alternative. TCO aims on removing this exception when a mercury free alternative is available.

CFCs (freons)

CFCs (freons) are sometimes used for washing printed circuit boards and in the manufacturing of expanded foam for packaging. CFCs break down ozone and thereby damage the ozone layer in the stratosphere, causing increased reception on Earth of ultraviolet light with consequent increased risks of skin cancer (malignant melanoma).
The relevant TCO'95 requirement: Neither CFCs nor HCFCs may be used during the manufacturing of the product or it's packaging.

Federal Communications Commission (FCC) Statement

MD22292B 9.2 Million Pixels Ultra Wide View Color FTF LCD Monitor

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at his own expense.

Properly shielded and grounded cables and connectors must be used in order to meet FCC emission limits. IDTech is not responsible for any radio or television interference caused by using other than recommended cables and connectors or by unauthorized changes or modifications to this equipment. Unauthorized changes or modifications could void the user's authority to operate the equipment.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Industry Canada Class A Emission Compliance Statement

This Class A digital apparatus complies with Canadian ICES-003.

Avis de Conformité á la Réglementation díIndustrie Canada

Cet appareil numérique de classe A est conforme á la norme NMB-003 du Canada.

Deutsche EMV-Direktive (electromagnetische Verträglichkeit)

Dieses Gerät ist berechtigt in Übereinstimmung mit dem deutschen EMVG vom 9.Nov.92 das EG-Konformitätszeichen zu f̧ hren.

Der Aussteller der Konformitätserklärung ist die IDTech.

Dieses Gerät erfüllt die Bedingungen der EN 55022 Klasse A. Für diese Klasse von Geräten gilt folgende Bestimmung nach dem EMVG:

Geräte dürfen an Orten, für die sie nicht ausreichend entstört sind, nur mit besonderer Genehmigung des Bundesminesters für Post und Telekommunikation oder des Bundesamtes fur Post und Telekommunikation betrieben werden. Die Genehmigung wird erteilt, wenn keine elektromagnetischen Störungen zu erwarten sind.

(Auszug aus dem EMVG vom 9.Nov.92, Para.3. Abs.4)

Hinweis: Dieses Genehmigungsverfahren ist von der Deutschen Bundespost noch nicht veröffentlicht worden.

European Union – EMC Directive

This product is in conformity with the protection requirements of the EU Council Directive 89/366/ECC on the approximation of the laws of the Member States relating to electromagnetic compatibility.

IDTech cannot accept responsibility for any failure to satisfy the protection requirements resulting from a non-recommended modification of the product, including the fitting of non-IDTech option cards.

This product has been tested and found to comply with the limits for Class A Information Technology Equipment according to CISPR 22/European Standard EN 55022. The limits for Class A equipment were derived for commercial and industrial environments to provide reasonable protection against interference with licensed communication equipment.

Warning: This is a Class A product. In a domestic environment this product may cause radio interference, in which case the user may be required to take adequate measures.

Union Européenne – Directive Conformité électromagnétique

Ce produit est conforme aux exigences de protection de la Directive 89/336/EEC du Conseil de l'UE sur le rapprochement des lois des États membres en matière de compatibilité électromagnétique.

IDTech ne peut accepter aucune responsabilité pour le manquement aux exigences de protection résultant d'une modification non recommandée du produit, y compris l'installation de cartes autres que les cartes IDTech.

Ce produit a été testé et il satisfait les conditions de l'équipement informatique de Classe A en vertu de CISPR22/Standard européen EN 55022. Les conditions pour l'équipement de Classe A ont été définies en fonction d'un contexte d'utilisation commercial et industriel afin de fournir une protection raisonnable contre l'interférence d'appareils de communication autorisés.

Avertissement: Ceci est un produit de Classe A. Dans un contexte résidentiel ce produit peut causer une interférence radio exigeant que l'utilisateur prenne des measures adéquates.

Union Europea – Normativa EMC

Questo prodotto è conforme alle normative di protezione ai sensi della Direttiva del Consiglio dell'Unione Europea 89/336/CEE ull'armonizzazione legislativa degli stati membri in materia di compatibilità elettromagnetica.

IDTech non accetta responsabilità alcuna per la mancata conformità alle normative di protezione dovuta a modifiche non consigliate al prodotto, compresa l'installazione di schede e componenti di marca diversa da IDTech.

Le prove effettuate sul presente prodotto hanno accertato che esso rientra nei limiti stabiliti per le le apparecchiature di informatica Classe A ai sensi del CISPR 22/Norma Europea EN 55022. I limiti delle apparecchiature della Classe A sono stati stabiliti al fine di fornire ragionevole protezione da interferenze mediante dispositivi di comunicazione in concessione in ambienti commerciali ed industriali.

Avvertimento: Questo è un prodotto appartenente alla Classe A. In ambiente domestico, tale prodotto può essere causa di interferenze radio, nel qual caso l'utente deve prendere misure adeguate.

Unione Europea – Directiva EMC (Conformidad électromagnética)

Este producto satisface los requisitos de protección del Consejo de la UE, Directiva 89/336/CEE en lo que a la legislatura de los Estados Miembros sobre compatibilidad electromagnética se refiere.

IDTech no puede aceptar responsabilidad alguna si este producto deja de satisfacer dichos requisitos de protección como resultado de una modificación no recomendada del producto, incluyendo el ajuste de tarjetas de opción que no sean IDTech.

Este producto ha sido probado y satisface los limítes para Equipos Informáticos Clase A de conformidad con el Estándar CISPR22 y el Estándar Europeo EN 55022. Los limites para los equipos de Clase A se han establecido para entornos comerciales e industriales a fin de proporcionar una protección razonable contra las interferencias con dispositivos de comunicación licenciados.

Advertencia: Este es un producto de Clase A. En un entorno doméstico este producto podría causar radiointerferencias en cuyo caso el usuario deberá tomar las medidas adecuadas.

Statements for Other Countries

この装置は、情報処理装置等電波障害自主規制協議会(VCCI)の基準に基づく
クラスA情報技術装置です。この装置を家庭環境で使用すると電波妨害を引き
起こすことがあります。この場合には使用者が適切な対策を講ずるよう要求
されることがあります。

警告使用者:
這是甲類的資訊產品,在
居住的環境中使用時,可
能會造成射頻干擾,在這
種情況下,使用者會被要
求採取某些適當的對策。

Power Cord

For your safety, IDTech provides a power cord with a grounded attachment plug to use with this IDTech product. To avoid electrical shock, always use the power cord and plug with a properly grounded power outlet.
IDTech power cords used in the United States and Canada are listed by the Underwriter's Laboratories (UL) and/or certified by the Canadian Standards Association (CSA).

For units intended to be operated at 115 volts: Use a UL-listed and/or CSA-certified cord set consisting of a minimum 18 AWG, Type SVT or SJT three-conductor cord, a maximum of 15 feet long, and a parallel blade, grounding-type attachment plug rated 15 amperes, 125 volts.

For units intended to be operated at 230 volts (U.S. use): Use a UL-listed and/or CSA-certified cord set consisting of a minimum 18 AWG, type SVT or SJT three-conductor cord, a maximum of 15 feet long, and a tandem blade, grounding-type attachment plug rated 15 amperes, 250 volts.

For units intended to be operated at 230 volts (outside the U.S.): Use a cord set with a grounding-type attachment plug. The cord set should have the appropriate safety approvals for the country in which the equipment will be installed.

IDTech power cords for a specific country or region are usually available only in that country or region.

IDTech power cord part number	Used in these countries or regions
13F9959	United States of America
13F9996	Denmark
14F0032	United Kingdom, China (Hong Kong S.A.R.)
39H0212 or 6454377	Japan
14F0050	Switzerland
14F0068	Italy

MPRII

This product complies with Swedish National Council for Metrology (MPR) standards issued in December 1999 (MPRII) for very low frequency (VLF) and extremely low frequency (ELF) emissions.

Hinweise

Gemäß der Amtsblätter des BMPT Nm. 61/1991 und 6/1992 wird der Betreiber darauf aufmerksam gemächt, daß die von ihm mit diesem Gerät zusammengestellte Anlage auch den technischen Bestimmungen dieser Amtsblätter genügen muß.

Aus ergonomischen Gründen wird empfohlen, die Grundfarbe Blau nicht auf dunklem Untergrund zu verwenden (schlechte Erkennbarkeit, Augenbelastung bei zu geringem Zeichenkontrast).

Aus ergonomischen Gründen sollten nur Darstellungen auf dunklem Hintergrund bei Vertikalfrequenzen ab 60 Hz (ohne Zeilensprung) benutzt werden.
Die Konvergenz des Bildes kann sich auf Grund des Magnetfeldes am Ort der Aufstellung aus der Korrekten Grundeinstellung verändern. Zur Korrektur empfiehlt es sich deshalb, die Regler an der Frontseite für H STAT und V STAT so einzustellen, daß die getrennt sichtbaren Farblinien für Rot. Grün und Blau bei z.B. der Darstellung eines Buchstabens zur Deckung (Konvergenz) gelangen. Siehe hierzu auch die Erklärungen zu H STAT und V STAT.