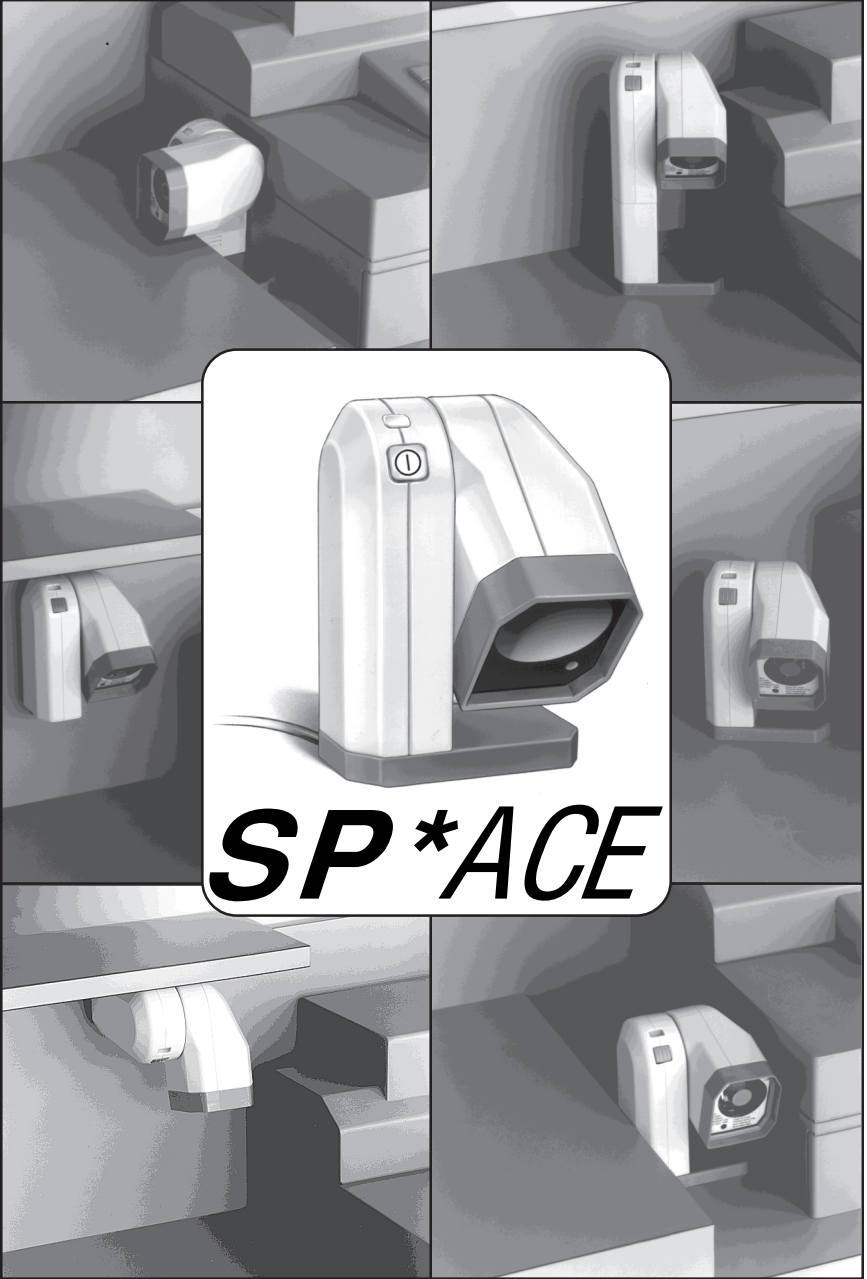


PSC[®]



SP*ACE

USER'S GUIDE

PSC INC.

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Disclaimer

Reasonable measures have been taken to ensure that all information contained in this manual is complete and accurate. However, PSC reserves the right to change any specification at any time without prior notice.

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PRODUCT OVERVIEW

The **SPACE** scanner can be easily mounted for either countertop or wall mounted installation and the scan head can be rotated 270°. This versatile mounting scheme facilitates easy and effective positioning in virtually any POS environment. The **SPACE** scanner incorporates both advanced digital software and high frequency power conversion circuitry to achieve the highest levels of scanning performance in the smallest possible package. Power can be supplied either through the POS interface cable or via a small accessory 12 volt power supply.

Additional innovative features include:

- asterisk scan pattern eliminates the need for label orientation
- presentation scanning that requires minimum space while providing a well-defined scan area
- user programmable features such as speaker volume and tone
- automatic shutdown when scanner is left idle which prolongs life of scanner motor and laser
- motion sensor that "knows" when you are ready to use it

OPERATIONAL OVERVIEW

There are three operational states called Normal Mode, Sleep Mode and Programming Mode. The indicator lamp description that follows tells how to identify these three states.

NORMAL MODE

Normal Mode refers to operation and idle time before the scanner enters Sleep Mode.

SLEEP MODE

Sleep Mode is the term used to describe the scanner's condition after the motor and/or laser have automatically switched off due to a prolonged period of inactivity.

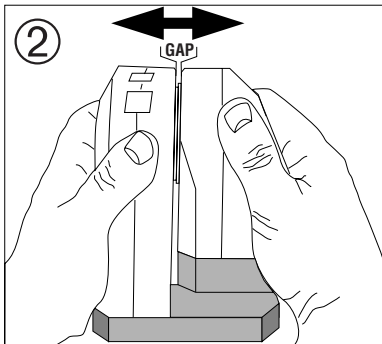
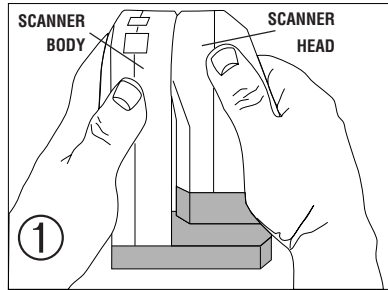
PROGRAMMING MODE

Programming Mode is a special condition used to change scanner features such as the user interface, scanner to host interface parameters, or laser and motor time-outs. Programming Mode also disallows scanning of normal barcodes or sending data to the host.

A set of special programming barcodes are contained in the Programming Kit (R44-1140) that is available from PSC or your dealer or distributor.

ROTATING THE SCAN HEAD

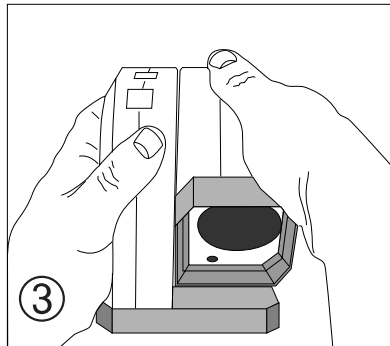
The *SP*ACE* scanner's head can be rotated 270° degrees (180° forward and 90° backward) to accommodate many scanner mounting options. Follow the instructions below to rotate the scan head.



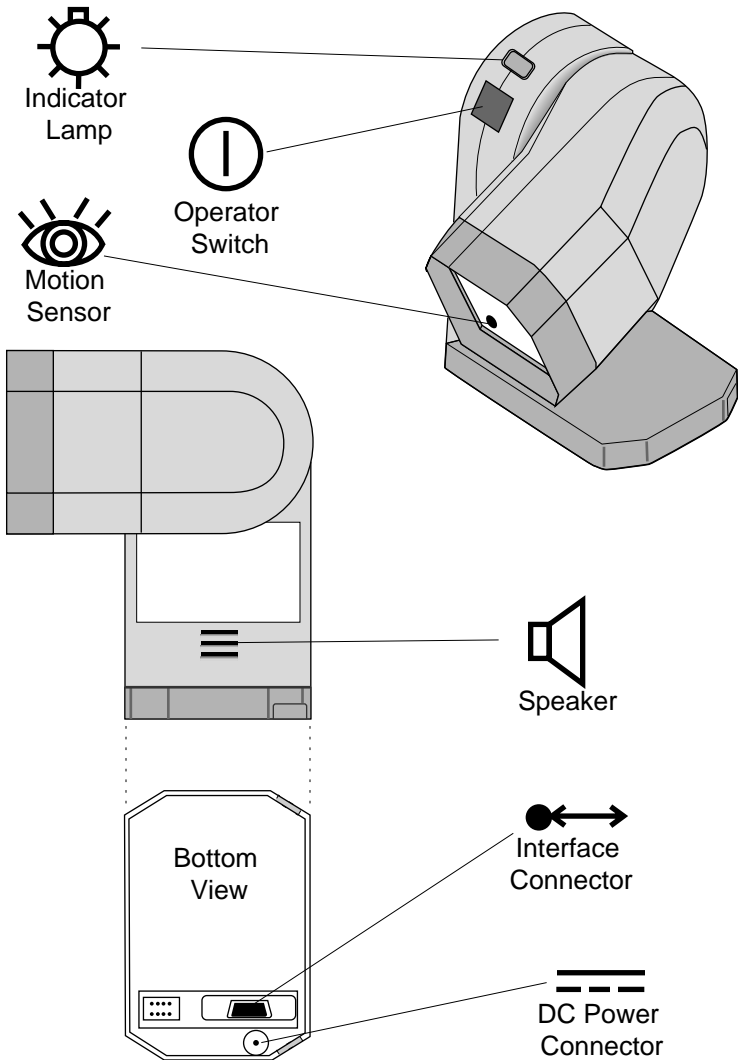
halves will open. This releases the locking mechanism.

③ Rotate the scanner head to the desired position and release the

- ① Grasp the scanner as shown.
- ② Pull the scan head to the right and the gap between the two



CONTROLS, INDICATORS & CONNECTORS



CONTROLS

OPERATOR SWITCH

The operator switch has three functions: wake-up the scanner (exit Sleep Mode), enter Programming Mode and Volume Selection.

WAKE-UP SCANNER

If green lamp is flashing slowly, the scanner is in Sleep Mode. Pressing and releasing the switch quickly (within three seconds) will wake the scanner up and return it to normal operation. This feature is a back-up to the motion sensor's automatic wake-up function.

ENTER PROGRAMMING MODE

Programming describes the process of changing scanner features using the special barcode labels contained in the Programming Guide (R44-1140). When the scanner is placed in Programming Mode, the scanner will not read any standard barcode labels or transmit any data to the host.

Pressing and holding the switch until you hear a tone and then releasing the switch before a second tone sounds places the scanner in Programming Mode. The indicator lamp will flash continuously two times per second until you exit Programming Mode.

The Programming Guide contains a description of Programming Mode and complete instructions for customizing your scanner's features.

VOLUME SELECTION

Enter Volume Selection by pressing and holding the switch longer than eight seconds until a second tone sounds. The second, alternate tone indicates that the scanner has entered Volume Selection. The scanner will cycle through the four volume selections sounding each one three times. Press the switch immediately after the desired volume has sounded to select that volume. Removing power from the scanner causes this setting to be forgotten. To change and keep this setting, you must use the barcode labels in the Programming Guide.

INDICATORS



The indicator lamp has six active levels; off, on dim, flash once, flashing continually once per second, flashing continually twice per second and repeating a series of flashes.

Off indicates that either there is no power to the scanner or the scanner is not operational.

On dim shows that the scanner is on and ready for operation. This is the normal operating condition.

Flashes once brightly when the scanner has read a barcode label this is usually accompanied by a good read tone from the speaker.

Flashing once per second indicates the scanner has automatically shut-down due to a prolonged period of inactivity. This condition is referred to as "Sleep Mode" which extends the life of scanner components by removing power from the laser diode and motor when the scanner is not in use. The length of time that the scanner waits before going into Sleep Mode can be changed using the programming labels contained in the Programming Guide (R44-1140).

Flashing twice a second indicates that the scanner is in Programming Mode. The scanner will not read regular barcode labels or send data to the host when in this mode.

Flashes repeatedly accompanied by a repeated series of tones indicates a failure has occurred. An interruption to communications or power as well as scanner or terminal failure can cause this condition.

SPEAKER



SPEAKER

The speaker produces an audible indication of scanner operation. It sounds a normal tone, an alternate tone, or a repeating series of tones.

NORMAL TONE

The normal tone sounds when a barcode label is recognized, its content decoded and the data is transmitted to the host.

ALTERNATE TONE

The alternate tone sounds in three different situations.

- In normal mode when the barcode has been read but the scanner is not programmed to transmit that symbology to the host.
- When the operator switch is held down to enter Volume Selection, the second tone you hear is the alternate tone indicating that it is time to release the switch.
- When in Programming Mode, any programming label that your scanner cannot use (e.g. Baud Rate for any interface other than RS-232) is rejected and the alternate tone is sounded.

ERROR TONE

The error tone is a repeating series of tones alerting the operator of possible system or component failure.

CONNECTORS



This connector provides the link between the scanner and the host. It always transmits label data and, depending on your system configuration, can supply power to the scanner from the host.



The D.C. power connector is for connecting the optional power supply. This power supply is not required if scanner uses power-off-terminal (POT) feature.

NEW FEATURE



The scanner includes a motion sensor that detects activity in front of the scan window. Waving your hand or merchandise in front of the window wakes the scanner up when it is in Sleep Mode. In certain lighting conditions it may be necessary to press the operator's switch to wake-up the scanner.

UNPACKING

Before you open the **SPACE** shipping carton, inspect the carton for damage. If the carton is torn or crushed, carefully inspect the contents to ensure that no damage has occurred. Notify your carrier immediately if you think that there has been any damage to the contents.

When you open the shipping carton, you should find:

- User's Guide
- **SPACE** scanner
- Mounting hardware kit (screws and hardware for your specific installation requirements)
- AC to DC Power Supply (if required)
- Interface Cable (if ordered)

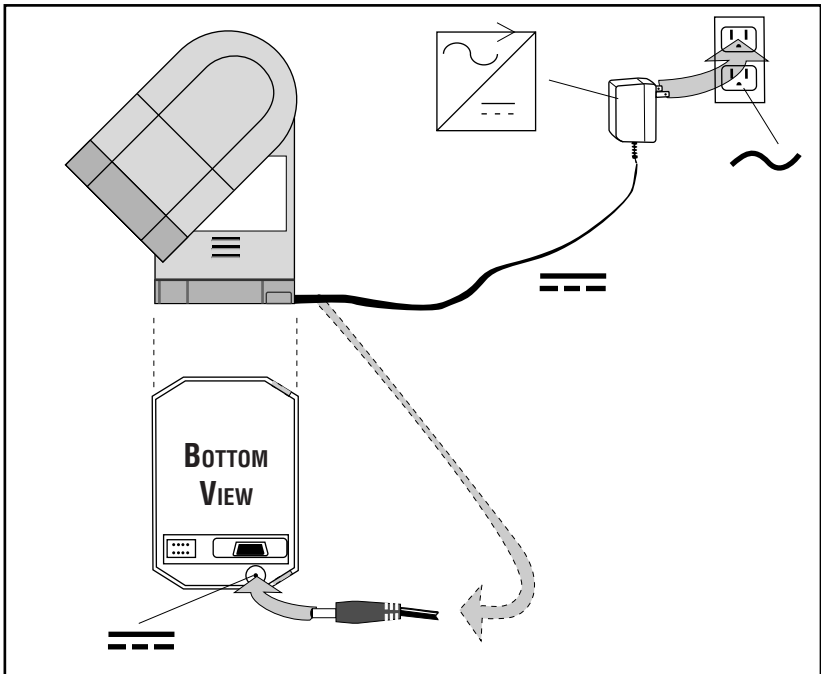
If anything is missing or the wrong power supply has been included with your scanner, contact your dealer, distributor or call your local PSC office. In the U.S. and Canada call PSC Customer Support Services at (800) 547-2507.

VERIFY SCANNER OPERATION

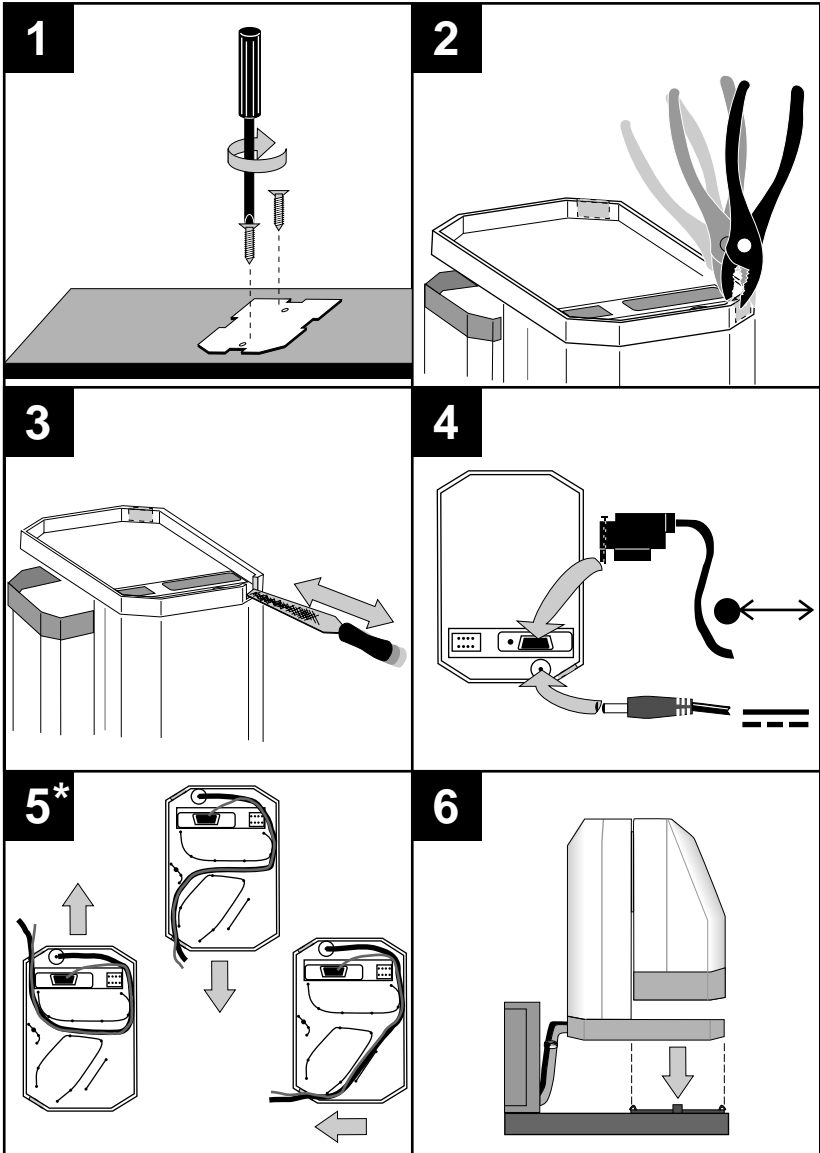
Prior to installation, we recommend that you connect the scanner as shown below to ensure that the scanner is fully functional. The scanner should emit a tone indicating that it has passed the Power-Up Self-Test routine, and the green lamp will light continuously indicating that the scanner is ready for operation. Since the scanner is not connected to a host terminal, it may only read one or two labels before it must be reset. This is normal because some terminal interfaces require the scanner to store label data until the POS terminal signals that it is ready to receive the data.

If your scanner uses the power-off-terminal (POT) option, you will not be able to perform this operational test without connecting the scanner to the host terminal. The POT option requires an interface cable constructed to supply power as well as transmit label data.

If the scanner powers-up, but the green lamp begin flashing and the speaker repeats a series of tones, go to the section titled, *Problem Isolation*.



COUNTERTOP INSTALLATION

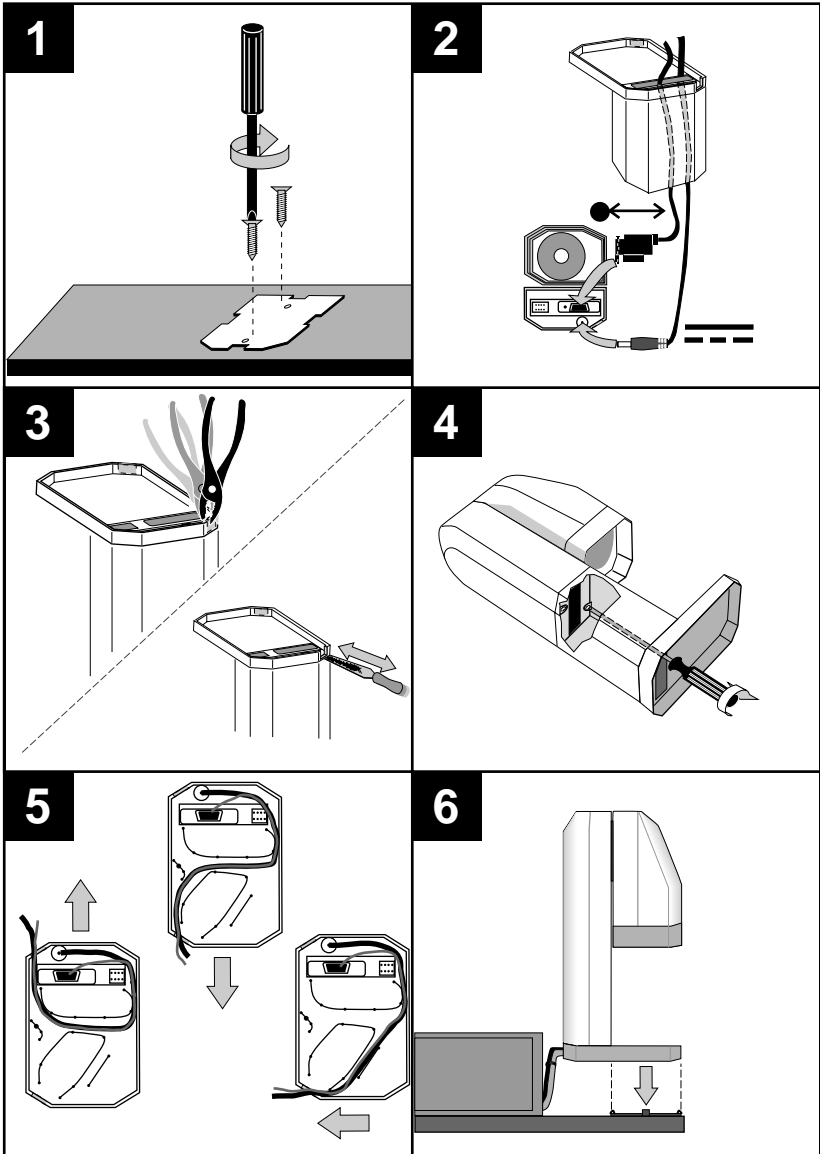


COUNTERTOP INSTALLATION INSTRUCTIONS

Refer to the figure on the facing page when following these steps.

- 1** Locate the mounting position of the scanner and install the mounting plate.
- 2** Remove the appropriate cable routing knockout. The three cable exit directions shown in step five on the opposite page will help you determine which knockout to remove.
- 3** Remove all rough edges around the knockout hole.
- 4** Attach the power and interface cables to the scanner. Be sure to tighten the screw that secures the interface cable to the scanner. Do NOT connect the cables to power or the terminal at this time.
- 5** Route the cables through the base. Three routing options are shown.
- 6** Lower the scanner onto the mounting plate and press down to secure the scanner to the plate. Proceed to the instructions titled *Connecting the Scanner* and *Power-Up Procedure* to complete the installation.

PEDESTAL INSTALLATION

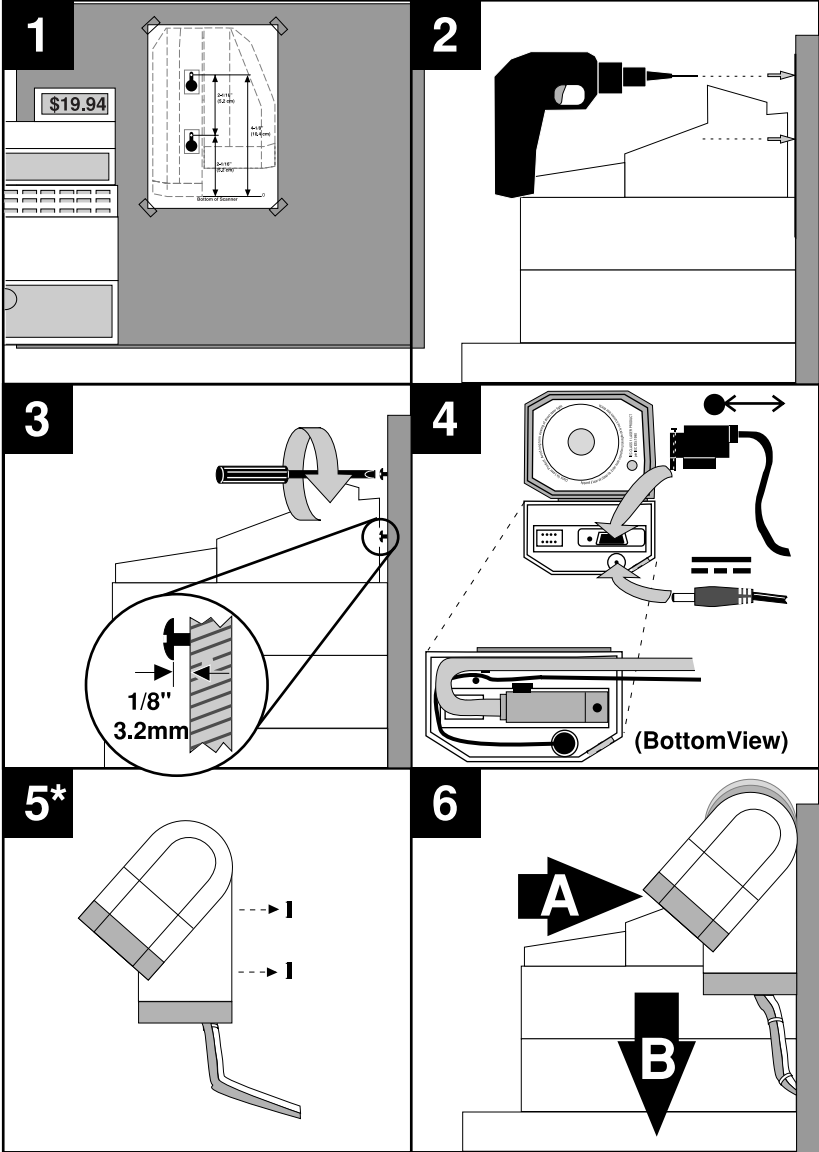


PEDESTAL INSTALLATION INSTRUCTIONS

Refer to the figures on the facing page when following these steps.

- 1** Locate the mounting position of the scanner and install the mounting plate.
- 2** Route the cables through pedestal and connect them to the scanner. Tighten the screw that secures the interface cable to the scanner. Do NOT connect cables to power or the terminal at this time.
- 3** Remove the appropriate cable routing knockout. The three cable routing directions shown in step five on the opposite page will help you determine which knockout to remove. Remove all rough edges around the knockout hole.
- 4** Attach the pedestal to the scanner using a flat-blade screwdriver to tighten the captive screws.
- 5** Route the cables through the base. Three routing options are shown.
- 6** Lower the scanner onto mounting plate and press down to secure the scanner to the plate. Proceed to the instructions titled *Connecting the Scanner* and *Power-Up Procedure* to complete the installation.

WALL MOUNT INSTALLATION



WALL MOUNT INSTALLATION INSTRUCTIONS

- 1** Make a copy of the mounting template on the next page and tape it where you will mount the scanner.
- 2** Drill two 3/32" (2.4mm) pilot holes for the mounting screws.
- 3** Install the two pan-head screws from the mounting hardware kit leaving 1/8" (3.2mm) space between the wall and the screw head.
- 4** Attach the power and interface cables to the scanner. Be sure to tighten the screw that secures the interface cable to the scanner. Route the cabled as shown.

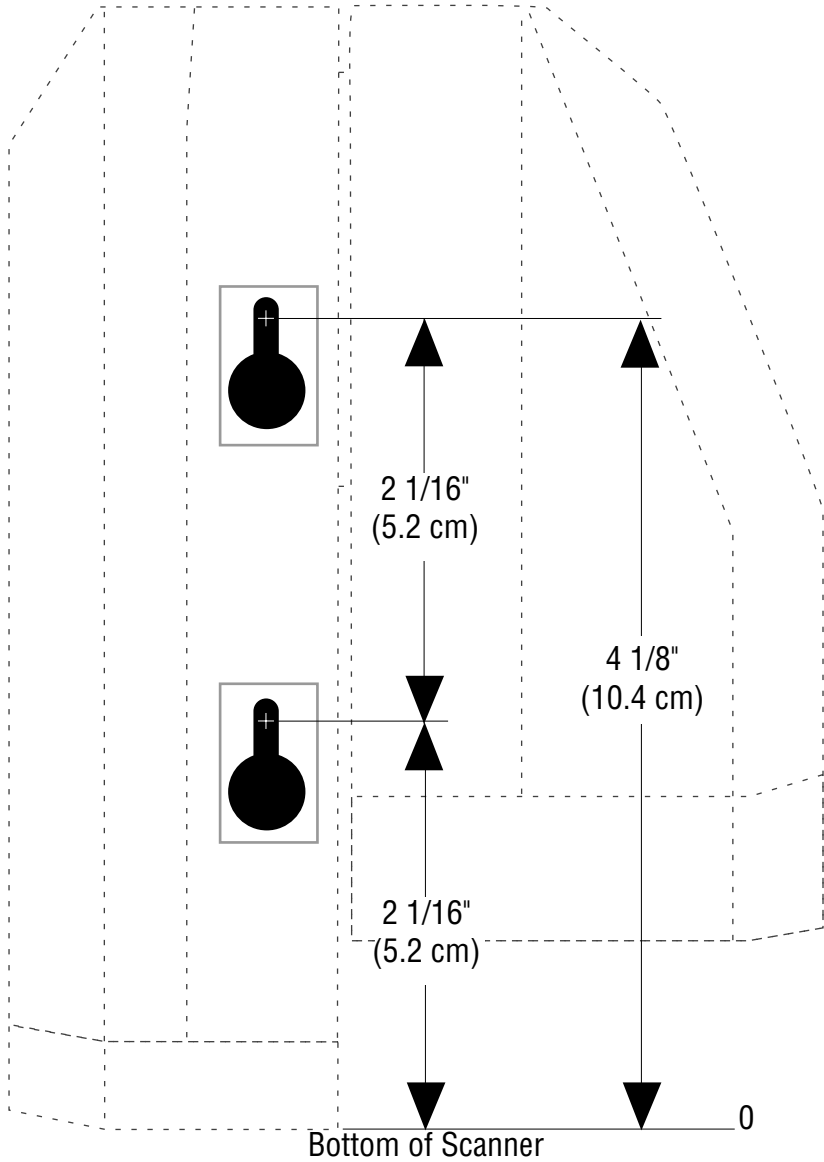
Do NOT connect cables to power or terminal at this time.

- 5**
- 6** Remove and discard the keyhole covers.

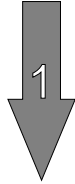
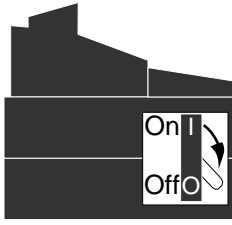
Install the scanner over the two screw heads (A). Slide the scanner down approximately 1/2" (12.7mm) (B) to lock it in place.

Proceed to the instructions titled *Connecting the Scanner* and *Power-Up Procedure* to complete the installation.

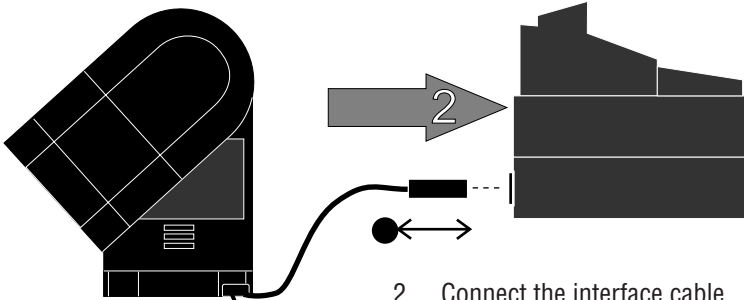
WALL MOUNTING TEMPLATE



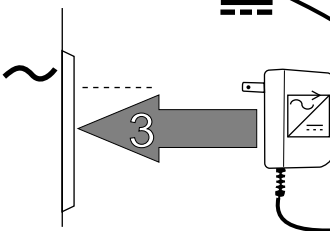
CONNECTING THE SCANNER



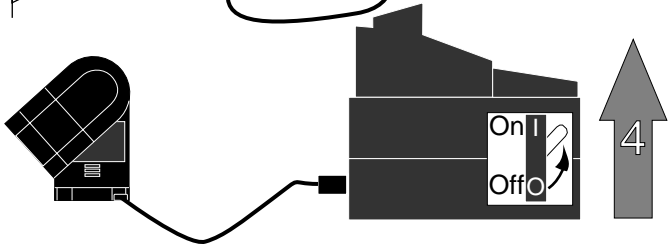
1. Switch the terminal power off.



2. Connect the interface cable to the terminal.



3. Plug in remote power supply.
(if required)



4. Power-up the terminal and verify the system's operation.

POWER-UP PROCEDURE

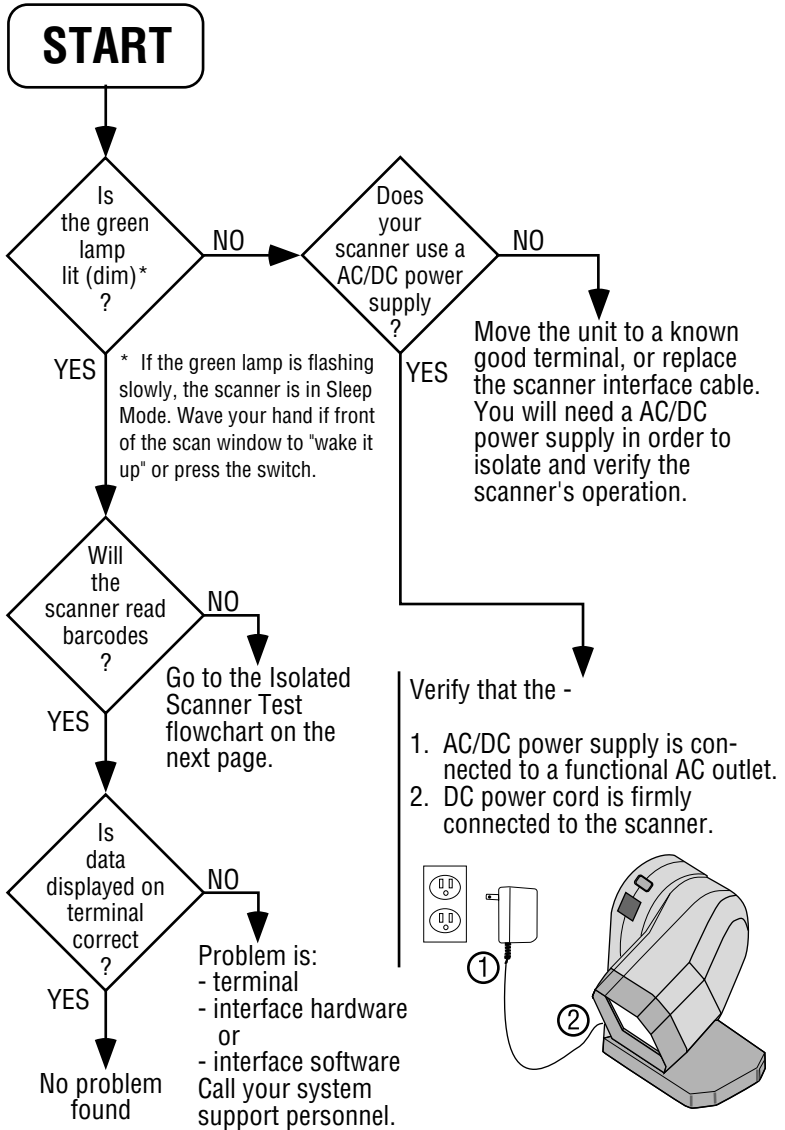
The system power-up procedure may vary depending on the requirements of your Point-of-Sale (POS) system. It is always a good idea to power-down (switch off) all equipment prior to connecting cables. Check with your system supervisor and/or refer to the terminal operator's manual for proper power-down and power-up procedures for your system.

1. Disconnect power from the scanner (if connected).
2. Power-down your terminal.
3. Connect the scanner interface cable to your POS terminal.
4. Connect the scanner's power supply to an AC outlet. If your scanner uses the power-off-terminal (POT) feature, this step is not necessary.
5. Power-up the terminal.
6. Verify that data is being properly communicated between the scanner and your POS terminal by scanning a few items.

You have completed the scanner installation and power-up procedures. If problems occur, follow the procedures titled *Problem Isolation* on the next page.

If you want to modify the scanner's interface parameters or change the user interface (e.g. tone and volume), order the **SPACE** Programming Guide (PSC Part Number R44-1140).

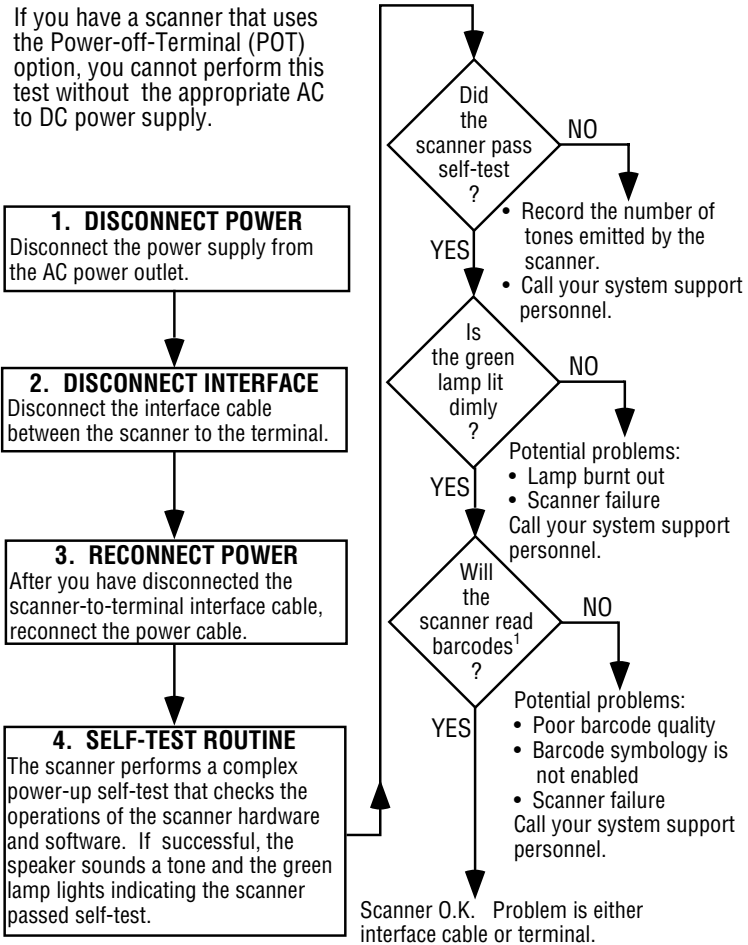
PROBLEM ISOLATION



ISOLATED SCANNER TEST

NOTE

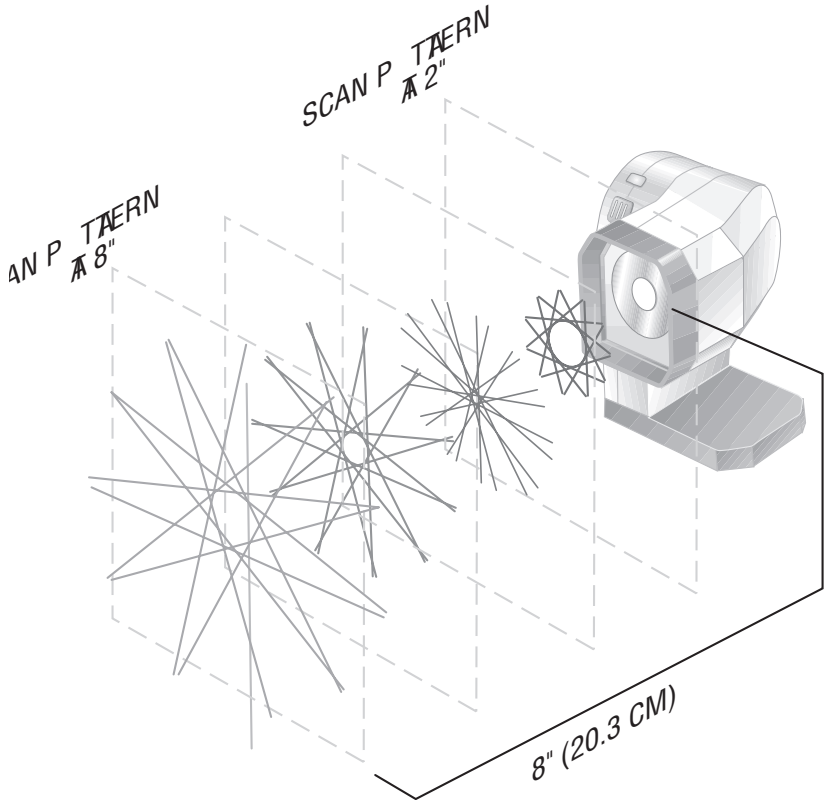
If you have a scanner that uses the Power-off-Terminal (POT) option, you cannot perform this test without the appropriate AC to DC power supply.



¹ When the interface cable has been disconnected and reconnected, the scanner may read one or two labels before it must be reset.

HOW TO SCAN

The **SPACE** scanner is a presentation scanner designed to fit easily into checkstand environments with limited space. As the illustration below shows, **SPACE** produces a dense scan pattern which ensures that a barcode is easily read whenever it is placed in the area in front of the scanner's window. This area called the Read Zone extends eight inches in front of the window and expands as you move away from the scanner's window. When the barcode enters the Read Zone in any orientation, the scanner immediately reads the label successfully completing the scanning operation.



CUSTOMIZING YOUR SCANNER'S OPERATION

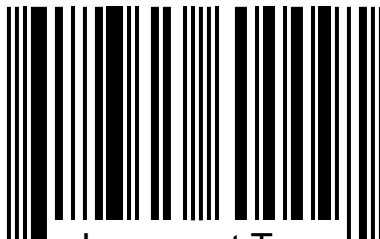
Customizing or programming a scanner provides maximum flexibility and allows a single scanner to serve many installation environments. Since the **SPACE** scanner supports a variety of interface configurations and barcode symbologies, it may be necessary to customize your scanner to meet the specific requirements of your retail environment. The two features that follow, Changing the Tone and Changing the Volume, are examples of special barcode labels that affect the scanner's operation.

The list on page 27 shows the additional features that may be changed using the **SPACE** Programming Guide (PSC Part Number R44-1140).

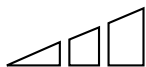


CHANGING THE TONE

There are three possible tone selections. Each time you scan this label the scanner's tone will change to the next highest tone. If the current tone is the highest selection, the selection will return to the lowest setting.

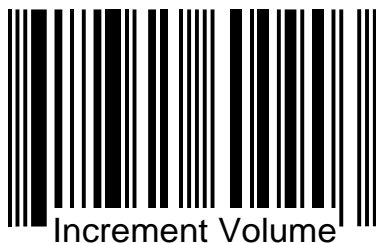


Increment Tone



CHANGING THE VOLUME

There are three possible volume settings. Each time you scan this label the scanner's volume will change to the next highest level. If the current volume is the highest selection, the selection will return to the lowest setting.





CLEANING

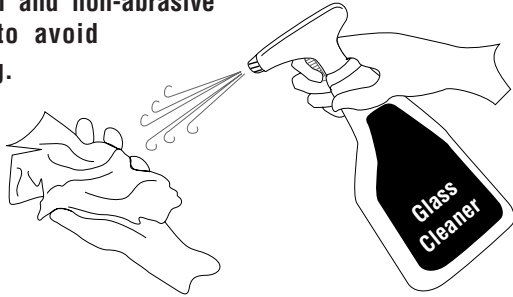
The scan window may require periodic cleaning to ensure highest possible performance.



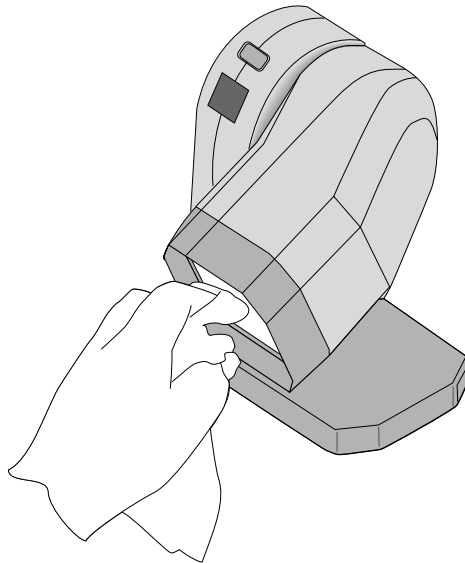
NOTE

The scanner window is high quality, optical grade plastic. Use a soft lens cloth and non-abrasive cleaner to avoid scratching.

1. Spray cleaner onto lint free, non-abrasive cleaning cloth.



2. Gently wipe the scanner window.



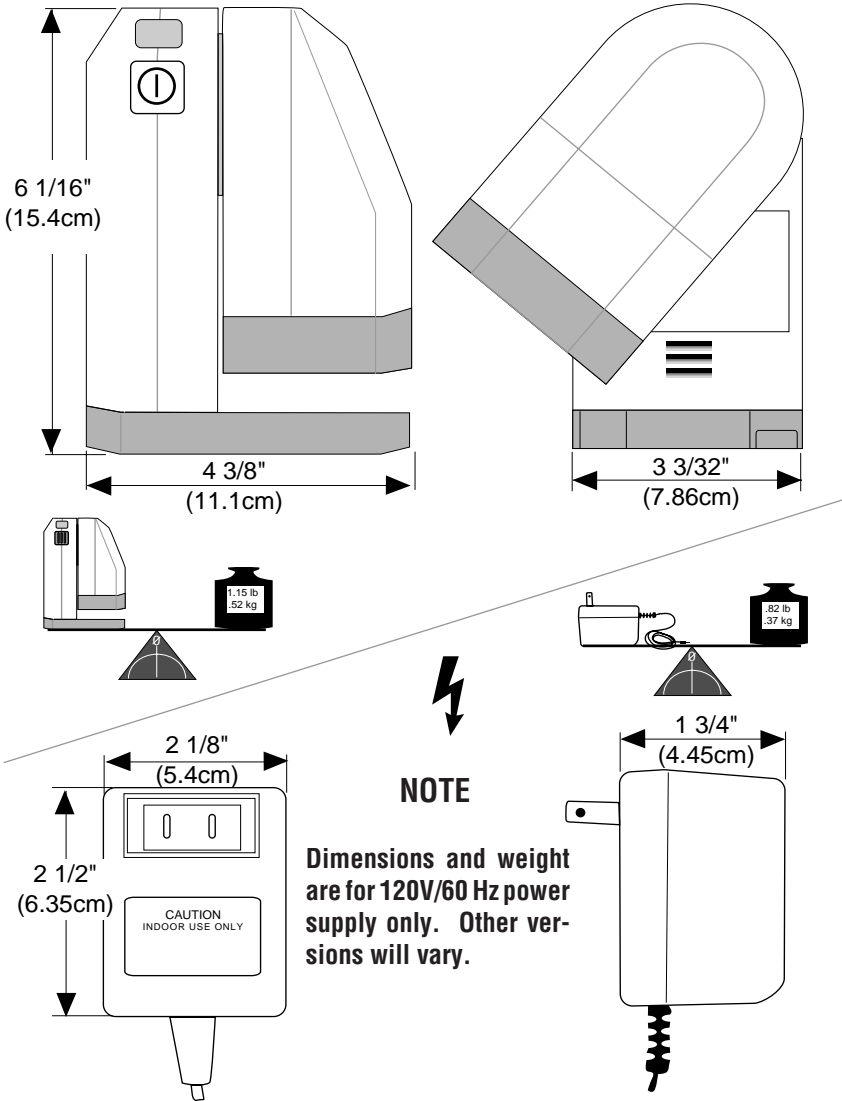
OTHER PROGRAMMABLE FEATURES

Additional programmable features include:

- Symbology selection:
 - UPC/EAN/JAN
 - UPC with two and five digit add-ons
 - Code 39
 - Codabar
 - Interleaved 2 of 5
 - Code 128
 - Code 93
- Symbology specific parameters including:
 - Interleaved 2 of 5 label lengths
 - Checksum, prefix and start/stop bit control
 - Price weight check digit control
 - Double Read Time-out
 - UPC expansion
- RS-232 Communication parameters
 - Baud Rate
 - Parity
 - Handshaking
 - Stop Bits
- Motor time-out
- Laser time-out
- Tone selection
- Volume selection

SPECIFICATIONS

PHYSICAL SPECIFICATIONS



ENVIRONMENTAL SPECIFICATIONS

OPERATION

TEMPERATURE



10°C (50°F)



40°C (104°F)

HUMIDITY



5 - 90 % (non-condensing)

AMBIENT LIGHT



200 footcandles (2150 Lux)

STORAGE

TEMPERATURE



-40°C (-40°F)



70°C (158°F)

HUMIDITY



5 - 95 % (non-condensing)

ELECTRICAL SPECIFICATIONS

SPACE requires 450mA at +12 volts DC (VDC).

Actual power consumption is approximately 450mA during operation and 250mA in Sleep Mode.

INPUT POWER

The **SPACE** scanner accepts D.C. power from either an external power supply or through the interface/power cable connected to the host.

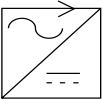
EXTERNAL POWER SOURCE



115 - 240VAC 50/60Hz 4.0 Watts

AC TO DC POWER SUPPLIES

This list shows the optional power supplies that are available.



COUNTRY	AC VOLTAGE
Australia -----	240
Benelux -----	220
Canada -----	115/120
France -----	220
Germany -----	220
Italy -----	220
Japan -----	100
Mexico -----	115/120
Scandinavia -----	220
Spain -----	220
United Kingdom -----	240
United States -----	115/120

POWER FROM HOST

If power is supplied by the host, the host must provide 450mA of current at +12 VDC.

LASER & PRODUCT SAFETY

FCC STATEMENTS

This device complies with Part 15 of the FCC rules and the Radio Interference Regulation of the Canadian Department of Communications for a Class A computing device. Operation is subject to the following two conditions:

1. This device may not cause harmful interference;
2. This device must accept any interference received including interference that may cause undesired operation.

This equipment has been tested and found compliant 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 or her own expense.

The electrical socket for this product must be located near the scanner and be readily accessible to the operator.



This is to certify that the **SPACE** scanner complies with the EMC Directive 89/336/EEC; addendums 92/31/EEC and 93/68/EEC for residential, commercial and light industrial environments. The **SPACE** scanner meets the above directive requirements for both electromagnetic compatibility (EMC) and immunity by the declaration of conformity. The CE mark is affixed to the product as testimony that it meets the above relevant directive. This product passes the following standards:

- EN 55022 class A

CANADIAN CSA STATEMENT

This Class B digital apparatus meets all requirements of the Canadian Interference Causing Equipment Regulations.

Cet appareil numérique de la classe B respecte toute les exigences du Règlement sur le matériel brouilleur du Canada.

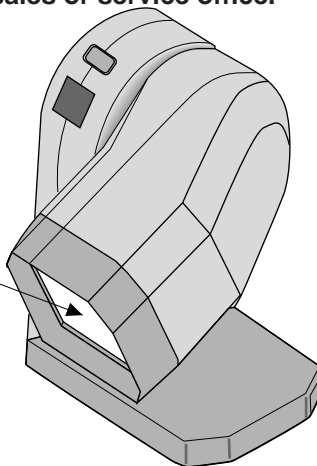
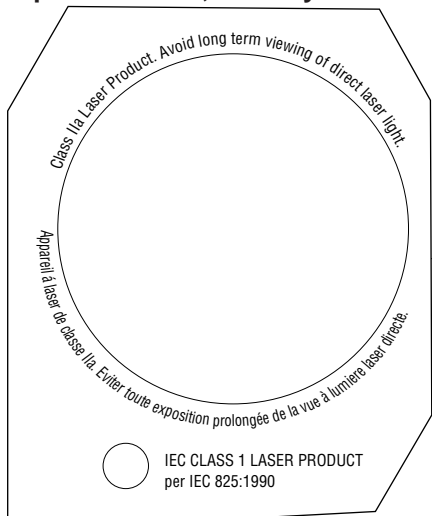
AGENCY COMPLIANCE

The **SPACE** scanner is designed to meet or exceed the requirements for its device type as set forth by the following agencies and regulations:

- United States Laser Safety, CDRH Class IIa (Reference 2.5)
- Underwriter's Laboratories, UL Standard 1950, for Electrical Safety
- Canadian Standards Association, Standard for Electrical Safety, #22.2 no. 950-M89
- United States Federal Communications Commission, Class A Emission Limits defined by Part 15, Subpart J, 47CFR
- TÜV Electrical Safety, according to EN60 950: 02.89 (German version)
- Laser Safety, Class I, according to IEC 825 and VDE 0837/2.86
- Voluntary Control Council for Interference, according to VCCI-1(0)
- VDE Emissions Limit B, according to DIN/VDE 0871/6.78
- Standards Association of Australia, Laser Safety Standard AS 2211-1991
- Approval and Test Specification, General Requirement for Electrical Materials and Equipment, AS 3100-1982
- CE mark EN55022-B, IEC 801-2/3/4

SCANNER LABELING

This artwork shows label placement **ONLY**. For actual regulatory, patent and other applicable information, view the labels on the product itself, or call your nearest sales or service office.



CAUTION - LASER RADIATION
WHEN OPEN. DO NOT STARE
INTO BEAM.

ATTENTION - RAYONNEMENT
LASER EN CAS D'OUVERTURE.
NE PAS REGARDER DANS
LE FAISCEAU.

VORSICHT - LASERSTRLHUNG, WENN
ABDECKUNG GEOFFNET NICHT IN DEN
STRAHL BLINKEN.

VARO! AVATTAESSA OLET ALTTIINA
NAKYVALLE LAESTEILYLLE. ALA
KATSO SATEESEEN.

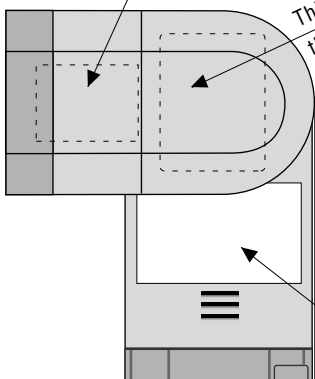
VARNING - SYNLIG
LASERSTRALNING NAR
DENNA DEL AR OPPNAD.
BETRAKTA EJ STRALEN.

ATTENZIONE - RADIAZIONE
LASER IN CASO DI APERTURA.
091NON FISSARE IL FASCIO.

ADVARSEL - LASERSTRALING
NAR DEKSEL APNES. STIRR
IKKE INN I STRALEN.

LASERSTÅLING VED ÅRNING
SE IKKE IND I STRALEN.

*This label located inside
the scanner's housing.*



PSC INC. 959 Terry Street Eugene, OR 94702 USA

MODEL: _____

SERIAL NO: _____

MANUFACTURED: _____

COVERED BY ONE OR MORE OF THE FOLLOWING PATENTS:
 10-16V THIS LASER PRODUCT COMPLIES WITH 21CFR 1040 AS APPLICABLE

Other Patents Pending
 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.

TUV PRODUCT GROUP GS

CE

Funkentorst Vlg 1046 LR89115 Listed 791K

S FI N D

UL

LASER SAFETY INFORMATION

The **SPACE** scanner requirements for laser safety are based on IEC Standard Publication 825 and CDRH 21CFR, Chapter 1, Subchapter J and (CDRH) Laser Product Performance Standard published November 28, 1978, User information [1040.10(h)1]:

1. **User Maintenance.** No user maintenance of the system, other than window replacement and cleaning is required.
2. **Radiant Energy.** This product uses an embedded Class 3B Visible Laser Diode (VLD) system operating at 670nm in an optomechanical scanner resulting in less than 348 μ W peak output power as measured by IEC 825 Class 1 specification. Radiated power observed 20cm above the top deck through a 7mm aperture and averaged over 1000 seconds is less than 2.5 μ W per CDRH Class IIa specification.
3. **Laser Light Viewing.** The scanner's window is the only aperture through which laser light may be observed in this product.
4. No adjustments or alteration of the scanner's housing are to be attempted by the user.
5. The failure of the scanner motor while the unit is continuing to emit a laser beam causes the emission levels to exceed those for inherently safe operation. This scanner has safeguards to prevent this occurrence. If, however, a stationary laser beam is ever emitted, the failing unit should be disconnected from its power source until repaired by a qualified technician.

INTERNATIONAL CAUTIONS

ENGLISH

The **SPACE** scanner is certified in the U.S. to conform to the requirements of DHHS/CDRH 21CFR Subchapter J for Class IIa laser products. The **SPACE** is also certified as a Class I laser product to the requirements of IEC 825:1984.

Class I and Class IIa products are not considered to be hazardous. The **SPACE** contains internally a Visible Laser Diode (VLD) that emits a maximum of 0.348 milliwatts at a wavelength of 670 nanometers. The scanner is designed so that there is no human access to harmful laser light during normal operation, user maintenance or during prescribed service operations.

CAUTION:

- Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous laser light.
- Do not attempt to open or otherwise service any component in the optics cavity. Opening or servicing any part of the optics cavity by unauthorized personnel may violate laser safety regulations. The optics system is a factory only repair item.
- Use of optical instruments with the scanner will increase eye hazard. Optical instruments include binoculars, microscopes and magnifying glasses. This does not include eye glasses worn by the user.

DANISH

SPACE scanner opfylder De Forenede Staters krav stillet i "DHHS/CDRH21CFR", Underafsnit J for Klasse IIa Laserprodukter. **SPACE** er også godkendt som et Klasse I Laserprodukt der opfylder kravene i IEC 825-1 : 1993.

Klasse I og Klasse IIa produkterne anses for at være ufarlige. **SPACE** indeholder en Visible Laser Diode (VLD) der udsender maksimalt 0,348 mW ved en bølgelængde på 670 nm. Scanneren er konstrueret så der ikke er nogen menneskelig kontakt med det skadelige laser lys under normalt brug, bruger vedligeholdelse eller under foreskrevet service.

ADVARSEL:

- Udførsel af eftersyn eller justeringer eller anvendelse af andre procedurer end foreskrevet i vejledningen, kan medføre at man udsættes for skadeligt laser lys.
- Forsøg ikke at åbne eller på anden vis udføre service på komponenter i det optiske hulrum. Uautoriseret åbning eller service af dele af det optiske hulrum, kan betyde overtrædelse af Laser sikkerheds regulativerne. Det optiske system må kun repareres af fabrikken.
- Brug af optiske instrumenter med scanneren vil forøge faren for øjenbeskadigelser. Optiske instrumenter indbefatter kikkerter, mikroskoper og forstørrelsesglas. Det indbefatter ikke briller båret af brugeren.

DUTCH

De **SPACE** scanner is in de V.S. goedgekeurd en voldoet aan de eisen van DHHS/CDRH21CFR Subchapter J voor Klasse-IIa (Class IIa) laserprodukten. De **SPACE** is ook goedgekeurd als een Klasse-I (Class I) laserprodukt volgens de eisen van IBC 825-1 : 1993.

Produkten van Klasse-I (Class I) en Klasse-IIa (Class IIa) worden niet geacht gevaarlijk te zijn. De **SPACE** bevat een inwendige Visible Laser Diode (VLD) buis die maximaal 0,348 milliwatt uitzendt bij een golflengte van 670 nanometer. De scanner is zo ontworpen dat men bij normaal gebruik, tijdens onderhoud of bij het uitvoeren van de voorgeschreven onderhoudswerkzaamheden niet aan schadelijke niveaus van laserlicht kan worden blootgesteld.

WAARSCHUWING:

- Men kan aan gevaarlijk laserlicht worden blootgesteld als de apparaten niet goed worden bediend of afgesteld, of als de procedures niet worden uitgevoerd zoals hierin beschreven staat.
- Probeer niet om onderdelen in de opticarimte te openen of er op enige wijze onderhoud aan uit te voeren. Openen of onderhoud van onderdelen van de opticarimte door onbevoegd personeel kan in strijd zijn met de laserveiligheidsreglementen. Het opticasysteem mag alleen in de fabriek worden gerepareerd.
- Gebruik van optische instrumenten met de scanner vergroot het gevaar dat de ogen aan schadelijke niveaus van laserlicht worden blootgesteld. Optische instrumenten zijn onder meer verrekijkers, microscopen en vergrootglazen. Zo de gebruiker een bril draagt, valt die niet onder optische instrumenten.

FINNISH

SPACE on hyväksytty Yhdysvalloissa vastaamaan DHHS/CDRH 21 CFR Subchapter J luokka IIa (Class IIa) lasertuotteille asetettuja vaatimuksia **SPACE** on myös hyväksytty vastaamaan IEC 825-1:1993 vaatimuksia I luokan (Class I) lasertuotteille.

Luokka I (Class I) ja luokka IIa (Class IIa) tuotteiden ei katsota olevan vaarallisia **SPACE** on sisäinen Visible Laser Diode (VLD) joka säteilee enintään 0,348 milliwattia 670 nanometrin aallonpituudella. Tutkain on suunniteltu siten, että sen käyttäjä ei joudu kosketuksiin vaarallisten laservalotasojen kanssa tutkaimen normaalikäytön, huoltotoimenpiteiden tai ohjeiden mukaisten huoltotöiden aikana.

VAROITUS:

- Laitteen käyttö tai säätö muuten kuin näiden ohjeiden mukaan, voi aiheuttaa vaarallista laservaloa.
- Älä yritä avata tai muuten huoltaa mitään komponentteja optisessa osassa. Mikäli epäpätevä henkilö korjaa tai avaa jonkin komponentin optisessa osassa, voidaan tämän katsoa olevan rikkomus turvallisuusohjeita vastaan. Optinen systeemi on osa, joka voidaan korjata ainoastaan tehtaalla.
- Optisten laitteiden käyttö tutkaimen kanssa lisää silmien vaaraa. Optisiin laitteisiin kuuluu mm. kiikarit, mikroskoopit ja suurennuslasit. Käyttäjän silmälasit eivät kuulu näihin laitteisiin.

FRENCH

Le **SPACE** est certifié conforme aux conditions requises par la norme DHHS/CDRH 21CFR, sous-chapitre J, concernant les appareils à laser de classe IIa aux Etats-Unis. Le **SPACE** est aussi certifié en tant qu'appareil à laser de classe I conforme aux conditions requises par la norme IEC 825:1993.

Les produits de classe I et classe II ne sont pas considérés comme dangereux. Le **SPACE** contient une diode laser visible (VLD) qui émet une puissance maximum de 0,348 milliwatts pour une longueur d'onde de 670 nanomètres. Le scanner est conçu pour que l'accès à des niveaux dangereux de lumière laser ne soit pas possible pendant l'utilisation normale, l'entretien par l'utilisateur ou les fonctions de dépannage recommandées.

ATTENTION:

- L'utilisation de procédures de contrôle, réglage ou utilisation autres que celles spécifiées dans ce document peut entraîner une exposition dangereuse à la lumière du laser.
- Ne pas essayer d'ouvrir ni de réparer les composants de la cavité optique. L'ouverture ou la réparation d'une partie de la cavité optique par une personne non qualifiée peut entraîner la violation des règles de sécurité relatives au laser. Le système optique ne peut être réparé qu'en usine.
- L'utilisation d'instruments optiques avec le scanner augmentera le danger pour les yeux. Les instruments optiques comprennent les jumelles, les microscopes et les loupes. Ils ne comprennent pas les lunettes portées par l'utilisateur.

GERMAN

Der Scanner **SPACE** entspricht den in den Vereinigten Staaten geltenden Vorschriften des DHHS/CDRH 21 CFR Subchapter J für Laserprodukte der Klasse IIa (Class IIa). Der **SPACE** ist ferner als ein Laserprodukt der Klasse I (Class I) nach den Vorschriften der IEC 825:1993 zugelassen.

Produkte der Klasse I (Class I) und der Klasse IIa (Class IIa) sind als ungefährlich eingestuft. Der **SPACE** enthält eine VLD-Diode, die maximal 0,348 Milliwatt auf einer Wellenlänge von 670 Nanometer ausstrahlt. Der Scanner ist so konstruiert, daß während des normalen Betriebs, der Wartung durch den Benutzer oder der vorgeschriebenen Wartungsvorgänge kein Zugang zu schädlichen Laserlichtstufen möglich ist.

VORSICHT:

- Jegliche Anwendung von Streuungen, Reglern oder anderen Verfahren, die nicht in diesen Ausführungen erwähnt werden, können eine gefährliche Laserlichtbestrahlung zur Folge haben.
- Das optische System darf nur vom Werk repariert werden. Das Öffnen oder Warten von Bestandteilen des optischen Hohlraums durch unbefugtes Personal verletzt die Laser-Sicherheitsbestimmungen.
- Der Gebrauch von optischen Instrumenten zusammen mit dem Scanner steigert die Gefahr der Augenschädigung. Zu optischen Instrumenten gehören Ferngläser, Mikroskope und Lupen, aber nicht vom Benutzer getragene Brillengläser.

ITALIAN

Il lettore **SPACE** è stato certificato negli Stati Uniti in conformità alle norme DHHS/CDRH 21 CFR, Subchapter J, per i prodotti laser di categoria IIa. **SPACE** è stato anche certificato come prodotto laser di categoria I, secondo le norme IEC 825-1 :1993.

I prodotti di categoria I e IIa non sono considerati pericolosi. **SPACE** contiene all'interno un diodo a laser visibile (VLD), che emette un massimo di 0,348 milliwatt ad una lunghezza d'onda di 670 nanometri. Il lettore è stato progettato in modo che sia impossibile l'accesso umano a livelli nocivi di luce laser nel corso del normale funzionamento o della manutenzione da parte dell'utente o durante gli interventi di riparazione previsti.

ATTENZIONE:

- l'uso di comandi o di procedure diversi da quelli specificati in questa sede possono causare l'esposizione ad una luce laser pericolosa.
- evitare di tentare di aprire o riparare dei componenti nella cavità ottica. L'apertura o la riparazione della cavità ottica da parte di persone non autorizzate può essere in violazione dei regolamenti di sicurezza relativi all'impiego di raggi laser. Il sistema ottico può essere riparato soltanto in fabbrica.
- l'impiego di strumenti ottici assieme al lettore fa aumentare il rischio di danni alla vista. Il termine "strumenti ottici" sta ad indicare binocoli, microscopi o lenti d'ingrandimento, ma esclude eventuali occhiali da vista indossati dall'utilizzatore.

NORWEIGAN

Skanneren **SPACE** er godkjent i USA ifølge retningslinjer fastsatt i DHHS/CDRH 21GFR, paragraf J for laserprodukter i klasse IIa (Class IIa). **SPACE** er også godkjent som et laserprodukt i klasse I (Class I), ifølge retningslinjer i IEC 825-1:1993.

Produkter i klasse I (Class I) og klasse IIa (Class IIa) regnes ikke som helsefarlige. **SPACE** har en innvendig, Visible Laser Diode (VLD) som avgir maksimum 0,348 milliwatt på en 670 nanometers bølgelengde. Skanneren er utformet slik at det ikke er mulig for personer å bli utsatt for skadelige doser av laserstråler ved normal bruk, vedlikehold som utføres av brukeren eller ved foreskrevne serviceoperasjoner.

ADVARSEL:

- Bruk av kontroller eller justeringer, eller utføring av andre prosedyrer enn de som er spesifisert her, kan føre til at man utsettes for livsfarlige laserstråler.
- Forsøk ikke å åpne eller på annen måte reparere komponenter i det optiske kammeret. Ingen del av det optiske kammeret må åpnes eller repareres av ikke-autorisert personale, da dette kan krenke forskrifter for sikker bruk av laserstråler. Det optiske systemet kan bare repareres på fabrikken.
- Bruk av optiske instrumenter sammen med skanneren øker mulighetene for øyenskade. Optiske instrumenter, omfatter kikkert, mikroskop og forstørrelsesglass. Vanlige briller regnes ikke med i denne kategorien.

PORTUGUESE

O scanner **SPACE** é certificado nos Estados Unidos em conformidade com os requerimentos do DHHS/CDRH 21 CFR Subcapítulo J para produtos a laser de Classe IIa (Class IIa). O **SPACE** também é certificado como um produto a laser de Classe I (Class I), de acordo com os requerimentos do IEC 825-1 : 1993.

Os produtos do tipo Classe I (Class I) e Classe IIa não são considerados perigosos. O **SPACE** contém em seu interior um Visible Laser Diode (VLD) que emite um máximo de 0,348 mW a um comprimento de onda de 670 nanômetros. O scanner foi projetado de maneira a não permitir o acesso humano em níveis nocivos de luz laser durante a operação normal, manutenção pelo usuário ou durante as operações de serviço preventivo.

CAUTION:

- O uso de quaisquer controles ou ajustes ou procedimentos além dos aqui especificados pode resultar em exposição perigosa à luz laser.
- Não tente abrir a cavidade ótica nem consertar, de forma alguma, qualquer de seus componentes. A abertura da cavidade ótica, ou o conserto de qualquer uma de suas peças por pessoal não autorizado poderá violar as normas de segurança para sistema de laser. O sistema ótico só poderá ser consertado pelo fabricante.
- O uso de instrumentos óticos com o scanner aumenta o perigo aos olhos. Instrumentos óticos incluem binóculos, microscópios e lentes de aumento. Estes não incluem os óculos do próprio usuário.

SPANISH

El escáner **SPACE** ha sido certificado en los Estados Unidos en cumplimiento con los requisitos DHHS/CDRH 21CFR Subchapter J para los productos láser de la Clase IIa. El **SPACE** ha sido también certificado como producto láser Clase I conforme a los requisitos de la IEC 825-1:1993.

Los productos de la Clase I y Clase IIa no se consideran peligrosos. El **SPACE** contiene un Diodo Láser Visible (VLD) interno que emite un máximo de 0,348 milivatios con una longitud de onda de 670 nanómetros. El escáner se ha diseñado para que las personas no sean expuestas a luz láser nociva durante su operación habitual, mantenimiento por parte del usuario u operaciones de servicio preventivo.

PRECAUCIÓN:

- el uso de controles o ajustes o la ejecución de procedimientos diferentes de los aquí especificados puede dar lugar a luz láser peligrosa.
- no trate de abrir o prestar servicio en forma alguna a ningún componente en la cavidad óptica. La apertura o reparación de cualquier parte de la cavidad óptica por personal no autorizado puede infringir las regulaciones de seguridad láser. El sistema óptico se puede reparar únicamente en la fábrica.
- el uso de instrumentos ópticos junto con el escáner, incrementará el daño visual. Los instrumentos ópticos incluyen los prismáticos, microscopios y lentes de aumento. Éstos no incluyen las gafas que lleve el usuario.

SWEDISH

Scannern **SPACE** uppfyller de amerikanska kraven DHHS/CDRH 21 CFR Subchapter J för klass IIa (Class IIa) laserprodukter **SPACE** har också registrerats som en Klass I (Class I) laserprodukt som uppfyller kraven IEC 825-1:1993.

Produkter i Klass I (Class I) och Klass IIa (Class IIa) anses ej farliga **SPACE** innehåller ett Internt Visible Laser Diode (VLD) rör med en maximal emission på 0,348 mW vid 670 nm våglängd. Scannern har byggts så ett laserljus av skadlig nivå inte kan nå människor vid normal användning, bruksunderhåll eller föreskriven service.

WARNING

- Om apparaten används på annat sätt än som specificerats i denna bruksanvisning kan användaren utsättas för farlig laserstrålning.
- Försök inte öppna eller reparera komponenter i den optiska kammaren. Om icke auktoriserad personal öppnar eller reparerar delar i den optiska kammaren, kan detta vara ett brott mot säkerhetsföreskrifterna för laserutrustning. Det optiska systemet får endast repareras i fabriken.
- Om optiska instrument används tillsammans med scannern ökar risken för ögonskador. Optiska instrument omfattar kikare, mikroskop och förstoringsglas. Glasögon som bärs av användaren omfattas ej av detta.

JAPANESE

SPACE point of sale scanner は、米国のDHHS/CDRH 21CFR Subchapter Jに記載されたクラスIIa(class IIa)のレーザー製品に関する要求基準に適合する事が認定されています。 **SPACE** はまた、IEC 825:1984のクラスI(class I)に関する要求基準にも適合することが認定されています。

クラスI(class I)、クラスIIa(class IIa)のレーザー製品は、危険物とは見なされません。**SPACE** は、670ナノメートルの波長のレーザー光を、最大0.348ミリワット放出するヘリウムネオン・レーザー管を内蔵しています。スキャナは、通常の操作、ユーザによるメンテナンス、所定のサービス作業の際に、人体に有害なレベルのレーザー光に作業者がさらされることのないよう設計されています。

注意:

本製品には、ユーザの安全を図るため3線電源コードとプラグが装備されています。感電防止のため、この電源コードを適切にアースされたコンセントに差し込んで下さい。

注意:

ここに明記された以外の方法により装置の制御、調整、運用を行なった場合、人体に有害なレーザー光に作業者がさらされる危険性があります。

注意:

光空洞共振器内の装置を開けたり、あるいは修理したりしないでください。許可を受けない者が光空洞共振器の装置を開けたり、修理したりすることは、レーザー取扱安全法に抵触します。光学システムは、工場でのみ修理されるものです。

HEBREW

סורק יב"מ מודל *SP*ACE* אושר בארה"ב כממלא אחר הדרישות של *SP*ACE* DHHS/CDRH 21 CFR Subchapter J למוצרי ליזר מסוג II א' (Class IIa). מודל מאושר גם כן כמוצר ליזר מסוג I (Class I) לצורך עמידה בדרישות של IEC825.1993. מוצרים מסוג I (Class I) ומסוג II א' (Class IIa) אינם נחשבים למסוכנים. יב"מ *SP*ACE* כולל בתוכו שפופרת דיודת ליזר נראית (VLD) המפיצה מקסימום של 0.348 מיליוואט באורך גל של 670 ננומטר. הסורק מעוצב כך שלא מתאפשרת גישה של בני אדם לרמות מזיקות של קרן אור ליזר במהלך ההפעלה, האחזקה על ידי המשתמש או פעולות אחזקה מתוכננות.

*SP*ACE*

זהירות:

מוצר זה מצויד בכבל חשמל תלת-גירי עם תקע לבטיחותו של המשתמש. חבר כבל זה לשקע חשמלי מוארק כהלכה על מנת למנוע מכת חשמל.

זהירות:

השמוש בבקרים, או כיוון המכשיר, או ביצועו של סדר פעולות כלשהו מעבר למצוין בזה עלולים לגרום לחשיפה מזיקה של המשתמש לקרני ליזר.

זהירות:

אין לנסות לפתוח או לטפל בחלק כלשהו בחלל האופטיקה. הפתיחה או הטיפול בחלק כלשהו בחלל האופטיקה, על ידי מי שלא הוסמך לכך, עלולים להפר את תקנות הבטיחות לטיפול במכשיר ליזר. מערכת אופטית זו מיועדת לטיפולו של היצרן בלבד.

SYMBOLS DEFINITIONS

We have selected the symbols on the following pages to help ensure clear communication with non-English speaking users.



A.C. TO D.C. CONVERTOR



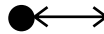
A.C. CURRENT



BRIGHTNESS/SUNLIGHT



CLEANING



COMMUNICATION (BI-DIRECTIONAL)



D.C. CURRENT



HUMIDITY



LAMP, VISUAL INDICATOR



MOTION SENSOR



ON/OFF SWITCH



OPERATOR



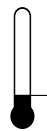
SPEAKER



TONE



TEMPERATURE, MAXIMUM



TEMPERATURE, MINIMUM



**VOLUME,
VARIABLE IN STEPS**



**DANGEROUS
VOLTAGE**

STANDARD WARRANTY

PSC warrants to Customer that PSC's products will be free from defects in materials and workmanship for a period of 90 days from product shipment.

In order to obtain service under this Warranty, Customer must notify PSC of the claimed defect before the expiration of the Warranty period and obtain from PSC a return authorization number for return of the product to designated PSC service center. If PSC determines Customer's claim is valid, PSC will repair or replace product without additional charge for parts and labor. Customer shall be responsible for packaging and shipping the product to the designated PSC service center, with shipping charges prepaid. PSC shall pay for the return of the product to Customer if the shipment is to a location within the country in which the PSC service center is located. Customer shall be responsible for paying all shipping charges, duties, taxes, and any other charges for products returned to any other locations.

Warranty is subject to the limitations and exclusions set forth below. Warranty set forth above is in lieu of any other warranties, expressed or implied, including merchantability and fitness.

EXCLUSIONS

Warranty coverage shall not apply to any claimed defect, failure or damage which PSC determines was caused by: improper use of product; failure to provide product maintenance, including but not limited to cleaning of the upper window in accordance with product manual; installation or service of product by other than PSC representatives; use of product with any other instrument, equipment or apparatus; modification or alteration of product. External cables and replacement of upper window/cartridge due to scratching, stains or other degradation will not be covered under the Warranty. External power supplies returned for service must be accompanied by the original product for performance of service.

LIMITATIONS OF LIABILITY

PSC repair or replacement of defective product as set forth above is the customer's sole and exclusive remedy on account of claims of breach of warranty or product defect. Under no circumstances will PSC be liable to customer or any third party for any lost profits, or any incidental, consequential indirect, special or contingent damages regardless of whether PSC had advance notice of the possibility of such damages.

ASSIGNMENT

Customer may not assign or otherwise transfer its rights or obligations under Warranty except to a purchaser or transferee of product. No attempted assignment or transfer in violation of this provision shall be valid or binding upon PSC.

RISK OF LOSS

Customer shall bear risk of loss or damage for product in transit to PSC. PSC shall assume risk of loss or damage for product in PSC's possession or product being returned to Customer by PSC, except such loss or damage as may be caused by the negligence of Customer, its agents or employees. In the absence of specific written instructions for the return of product to Customer, PSC will select the carrier, but PSC shall not thereby assume any liability in connection with the return shipment.

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