

LS1900
Series



symbol[®]

LS1900 Series

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Patents

This product is covered by one or more of the following U.S. and foreign Patents:

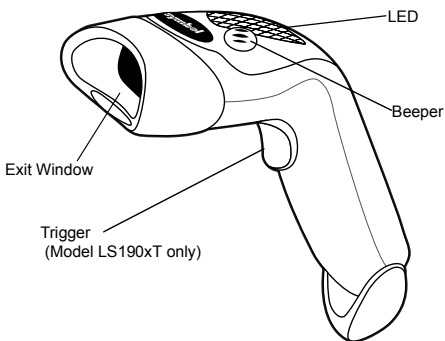
U.S. Patent No. 4,460,120; 4,496,831; 4,593,186; 4,603,262; 4,607,156;
4,652,750; 4,673,805; 4,736,095; 4,758,717; 4,816,660; 4,845,350; 4,896,026;
4,897,532; 4,923,281; 4,933,538; 4,992,717; 5,015,833; 5,017,765; 5,021,641;
5,029,183; 5,047,617; 5,103,461; 5,113,445; 5,130,520; 5,140,144; 5,142,550;
5,149,950; 5,157,687; 5,168,148; 5,168,149; 5,180,904; 5,216,232; 5,229,591;
5,230,088; 5,235,167; 5,243,655; 5,247,162; 5,250,791; 5,250,792; 5,260,553;
5,262,627; 5,262,628; 5,266,787; 5,278,398; 5,280,162; 5,280,163; 5,280,164;
5,280,498; 5,304,786; 5,304,788; 5,306,900; 5,321,246; 5,324,924; 5,337,361;
5,367,151; 5,373,148; 5,378,882; 5,396,053; 5,396,055; 5,399,846; 5,408,081;
5,410,139; 5,410,140; 5,412,198; 5,418,812; 5,420,411; 5,436,440; 5,444,231;
5,449,891; 5,449,893; 5,468,949; 5,471,042; 5,478,998; 5,479,000; 5,479,002;
5,479,441; 5,504,322; 5,519,577; 5,528,621; 5,532,469; 5,543,610; 5,545,889;
5,552,592; 5,557,093; 5,578,810; 5,581,070; 5,589,679; 5,589,680; 5,608,202;
5,612,531; 5,619,028; 5,627,359; 5,637,852; 5,664,229; 5,668,803; 5,675,139;
5,693,929; 5,698,835; 5,705,800; 5,714,746; 5,723,851; 5,734,152; 5,734,153;
5,742,043; 5,745,794; 5,754,587; 5,762,516; 5,763,863; 5,767,500; 5,789,728;
5,789,731; 5,808,287; 5,811,785; 5,811,787; 5,815,811; 5,821,519; 5,821,520;
5,823,812; 5,828,050; 5,850,078; 5,861,615; 5,874,720; 5,875,415; 5,900,617;
5,902,989; 5,907,146; 5,912,450; 5,914,478; 5,917,173; 5,920,059; 5,923,025;
5,929,420; 5,945,658; 5,945,659; 5,946,194; 5,959,285; 6,002,918; 6,021,947;
6,036,098; 6,047,892; 6,050,491; 6,053,413; 6,056,200; 6,065,678; 6,067,297;
6,068,190; 6,082,621; 6,084,528; 6,088,482; 6,092,725; 6,101,483; 6,102,293;
6,104,620; 6,114,712; 6,115,678; 6,119,944; 6,123,265; 6,131,814; 6,138,180;
6,142,379; 6,172,478; 6,176,428; 6,178,426; 6,186,400; 6,188,681; D305,885;
D341,584; D344,501; D359,483; D362,453; D363,700; D363,918; D370,478;
D383,124; D391,250; D405,077; D406,581; D414,171; D414,172; D418,500;
D419,548; D423,468; D424,035; D430,158; D430,159; D431,562; D436,104.
Invention No. 55,358; 62,539; 69,060; 69,187 (Taiwan); No. 1,601,796; 1,907,875;
1,955,269 (Japan).
European Patent 367,299; 414,281; 367,300; 367,298; UK 2,072,832; France 81/
03938; Italy 1,138,713.
rev. 04/01

Introduction

The LS1900 Series scanner combines excellent scanning performance and advanced ergonomics to provide the best value in a lightweight laser scanner. Whether used as a hand-held scanner or in hands-free mode in a stand, the LS1900 Series ensures comfort and ease of use for extended periods of time.

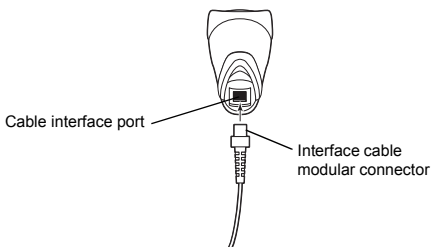
Note: Unless otherwise noted, the term LS190xx refers to all versions of the scanner.

Parts of the LS1900 Series Scanner



Installing the Interface Cable

1. Plug the interface cable modular connector into the cable interface port on the bottom of the LS1900 Series handle.





2. Connect the other end of the interface cable to the host.
3. Connect the power supply to the cable (if necessary).
4. Scan the appropriate bar code(s) beginning on page 33 to communicate with the host.

Removing the Interface Cable

Unplug the installed cable's modular connector by depressing the connector clip with the tip of a screwdriver.

Aiming

Note: The scanner performs best when it is not exactly perpendicular to the bar code.



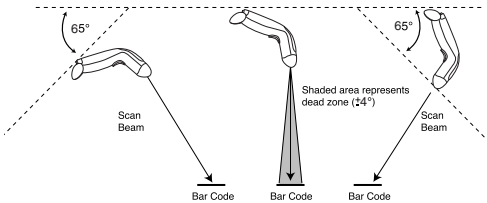
1. Successful Scanning



2. Possible Specular Reflection



3. Successful Scanning



Scanning In Hand-Held Mode

1. Ensure all connections are secure.
2. Aim the scanner at the bar code. (If your scanner has a trigger, aim the scanner and press the trigger.)
3. Ensure the scan line crosses every bar and space of the symbol.

RIGHT



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WRONG

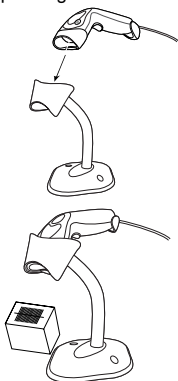


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4. Upon successful decode, the scanner beeps and the LED turns green.

Scanning in Hands-Free Mode

In the stand, the scanner is in constant-on mode. When you remove the scanner from the stand it operates in its normal hand-held mode (e.g., constant-on mode or trigger mode, depending on the model).



1. Insert scanner in stand.
2. Present bar code and ensure the scan line crosses every bar and space of the symbol.
3. Upon successful decode, the scanner beeps and the LED turns green.

Troubleshooting

Problem	Possible Cause	Possible Solutions
Nothing happens when you follow the operating instructions.	No power to the scanner.	Check the system power. Ensure the power supply is connected if your configuration requires a power supply.
	Interface/power cables are loose.	Check for loose cable connections.



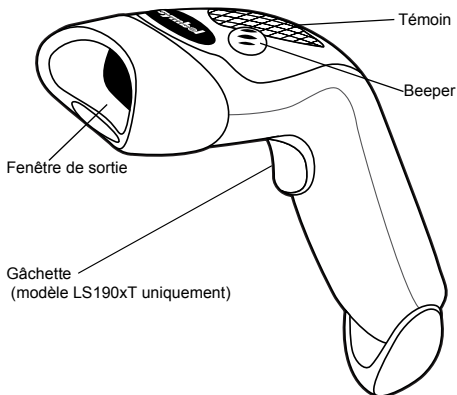
Problem	Possible Cause	Possible Solutions
Laser comes on, but symbol does not decode.	Scanner is not programmed for the correct bar code type.	Be sure the scanner is programmed to read the type of bar code you are scanning.
	Bar code symbol is unreadable.	Check the symbol to make sure it is not defaced. Try scanning test symbols of the same bar code type.
	Distance between scanner and bar code is incorrect.	Move the scanner closer to the bar code.
Symbol is decoded, but not transmitted to the host.	Scanner is not programmed for the correct host type.	Scan the appropriate host type bar code.
Scanned data is incorrectly displayed on the host.	Scanner is not programmed to work with the host. Check LS1900 Series host type parameters or editing options.	<p>Be sure proper host is selected.</p> <p>For RS-232, ensure the scanner's communication parameters match the host's settings.</p> <p>For a keyboard wedge configuration, ensure the system is programmed for the correct keyboard type, and the CAPS LOCK key is off.</p> <p>Be sure editing options (e.g., UPC-E to UPC-A Conversion) are properly programmed.</p>

Présentation

Le lecteur de la série LS1900 allie des performances de lecture excellentes à une ergonomie sophistiquée, ce qui fait de lui le meilleur lecteur laser léger de sa catégorie. Qu'il soit utilisé comme lecteur mains-libres ou inséré dans un support, le LS1900 est synonyme de confort et de simplicité d'emploi pendant de longues heures d'utilisation.

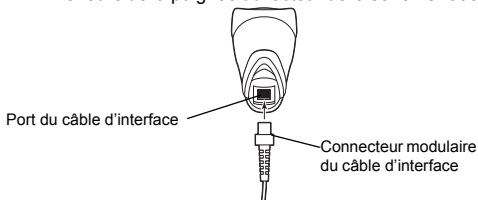
Remarque : Sauf mention particulière, le terme LS190xx désigne toutes les versions du lecteur.

Composants du lecteur de la série LS1900



Installation du câble d'interface

1. Branchez le connecteur modulaire du câble d'interface au port correspondant sur la partie inférieure de la poignée du lecteur de la série LS1900.



- Connectez l'autre extrémité du câble à l'ordinateur central.
- Branchez l'alimentation au câble (si nécessaire).
- Lisez les codes correspondants qui commencent page 33 pour communiquer avec l'ordinateur central.

Dépose du câble d'interface

Débranchez le connecteur modulaire du câble d'interface installé en appuyant sur le clip du connecteur avec l'extrémité d'un tournevis.

Visée

Remarque : On obtient les meilleures performances de décodage lorsque le lecteur n'est pas totalement perpendiculaire au code à barres.



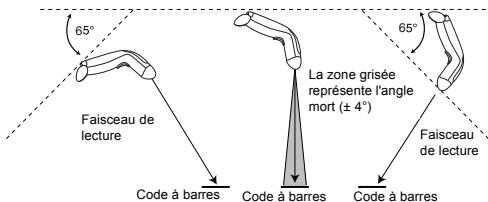
1. Lecture réussie



2. Risque de réflexion spéculaire



3. Lecture réussie



Lecture en mode portable

- Vérifiez tous les branchements.
- Pointez le lecteur sur le code à barres. (Si votre lecteur est muni d'une gâchette, visez, puis appuyez sur la gâchette.)
- Assurez-vous que le faisceau de lecture recouvre toutes les lignes et tous les espaces qui composent le code.

CORRECT



012345

INCORRECT

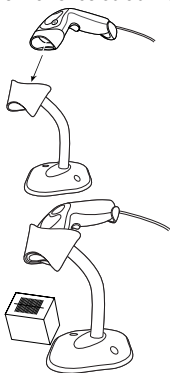


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- Lorsque le décodage est réalisé, le lecteur émet un bip sonore et le témoin vire au vert.

Lecture en mode mains-libres

Lorsqu'il est inséré dans son support, le lecteur est activé en permanence. Lorsque vous l'extrayez de son support, il se replace en mode portable normal (c'est-à-dire activé en permanence ou au moyen de la gâchette, selon le modèle).



1. Insérez le lecteur dans son support.
2. Présentez le code et assurez-vous que le faisceau de lecture recouvre toutes les lignes et tous les espaces qui le composent.
3. Lorsque le décodage est réalisé, le lecteur émet un bip sonore et le témoin vire au vert.

Dépannage

Problème	Cause probable	Solutions possibles
Vous avez suivi les instructions d'utilisation, mais rien ne se produit.	Le lecteur n'est pas alimenté.	Vérifiez l'alimentation du système. Assurez-vous que l'alimentation est raccordée si votre configuration l'utilise.
	Les câbles d'interface/ d'alimentation sont mal branchés.	Vérifiez que les câbles sont correctement branchés.
Le faisceau est activé, mais le code n'est pas déchiffré.	Le lecteur n'est pas programmé pour le bon type de code à barres.	Assurez-vous que le lecteur est programmé pour accepter le type de code à barres que vous tentez de lire.



Problème	Cause probable	Solutions possibles
(Suite)	Le code à barres est illisible.	Vérifiez que le code à barres est en bon état. Essayez de lire des codes du même type.
	Distance incorrecte entre le lecteur et le code à barres.	Rapprochez le lecteur du code à barres.
Le code est lu, mais il n'est pas transmis à l'ordinateur central.	Le lecteur n'est pas programmé pour le type d'ordinateur central qui convient.	Lisez le code à barres correspondant à l'ordinateur central en question.
L'affichage des données lues sur l'ordinateur central est incorrect.	Le lecteur n'est pas programmé pour utiliser cet ordinateur central. Vérifiez les paramètres du type d'ordinateur pour la série LS1900 ou les options d'édition.	<p>Vérifiez que l'ordinateur central correct est sélectionné.</p> <p>Pour le RS-232, vérifiez que les paramètres de communication du lecteur correspondent aux réglages de l'ordinateur central.</p> <p>Pour une configuration d'émulation clavier, assurez-vous que le système est programmé pour le bon type de clavier, et que la touche de verrouillage des majuscules est désactivée.</p> <p>Vérifiez que les options d'édition (ex. conversion UPC-E/UPC-A) sont correctement programmées.</p>

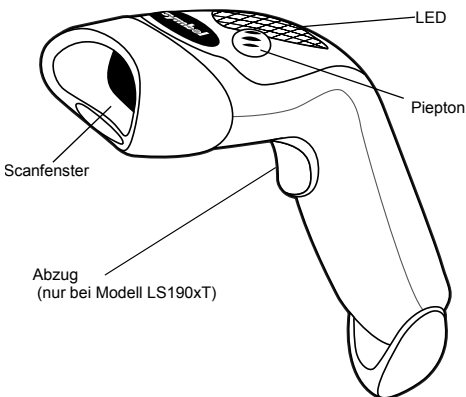
K u r z ü b e r s i c h t

Einführung

Bei den Scannern der Serie LS1900 vereinen sich hervorragende Leseleistungen und modernste ergonomische Eigenschaften. Das Ergebnis: Ein leichter Laserscanner mit dem besten Preis-Leistungs-Verhältnis seiner Klasse. Ungeachtet dessen, ob Sie die Modelle der Serie LS1900 als Handscanner oder im Freihandmodus in einem stationären Tischständer verwenden: Komfort und Bedienungsfreundlichkeit sowie eine lange Lebensdauer sind gewährleistet.

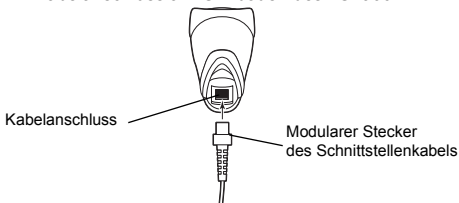
Hinweis: Falls nicht anders angegeben, bezieht sich die Bezeichnung „LS190xx“ auf alle Scannermodelle dieser Serie.

Die Teile der Scanner der Serie LS1900



Installieren des Schnittstellenkabels

1. Stecken Sie das Schnittstellenkabel in den Kabelanschluss am Griffboden des LS1900.



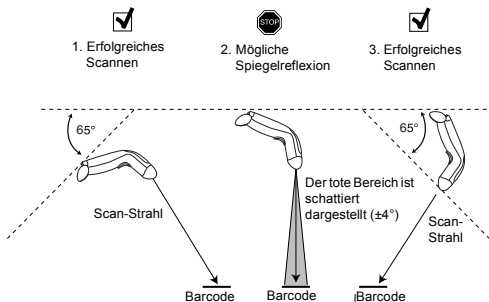
2. Verbinden Sie das andere Ende des Kabels mit dem Host.
3. Schließen Sie gegebenenfalls das Netzkabel an.
4. Scannen Sie den bzw. die entsprechenden Barcode(s), beginnend auf Seite 33, um die Kommunikation mit dem Host zu starten.

Abziehen des Schnittstellenkabels

Drücken Sie zum Herausziehen des modularen Steckers die Anschlussklemme mit der Klinge eines Schraubenziehers nach unten.

Zielvorgang

Hinweis: Die besten Scanleistungen werden erzielt, wenn Sie den Scanner nicht exakt senkrecht auf den Barcode richten.



Scannen mit dem Handscanner

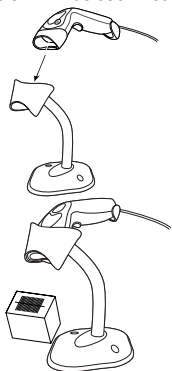
1. Vergewissern Sie sich, dass alle Anschlüsse festsitzen.
2. Zielen Sie mit dem Scanner auf den Barcode. (Wenn Ihr Scanner mit einem Abzug ausgestattet ist, zielen Sie mit dem Scanner, und betätigen Sie dann den Abzug.)
3. Es muss gewährleistet sein, dass die Scanzeile alle Balken und Zwischenräume des Symbols überstreicht.



4. Nach erfolgreichem Decodieren gibt der Scanner einen Piepton ab, und die grüne LED wird aktiviert.

Scannen im Freihandmodus

Im Tischständer bleibt der Scanner konstant eingeschaltet. Wenn Sie den Scanner aus dem Ständer nehmen, schaltet er in den normalen Handbetrieb um (das heißt, je nach Modell ist er dann konstant eingeschaltet oder er befindet sich im Auslöser-Betrieb).



1. Setzen Sie den Scanner in den Ständer ein.
2. Halten Sie den Barcode vor den Scanner. Es muss gewährleistet sein, dass die Scanzelle alle Balken und Zwischenräume des Symbols überstreicht.
3. Nach einem erfolgreichen Decodieren gibt der Scanner einen Piepton ab, und die grüne LED wird aktiviert.

Fehlerbehebung

Problem	Mögliche Ursache	Mögliche Lösungen
Sie gehen exakt nach der Bedienungsanleitung vor, und trotzdem passiert nichts.	Stromversorgung zum Scanner unterbrochen.	Überprüfen Sie die Stromversorgung des Systems. Stellen Sie sicher, dass die Stromversorgung angeschlossen ist (sofern Ihr System über einen Netzanschluss arbeitet).
	Schnittstellen- oder Stromkabel sind lose.	Überprüfen Sie, ob eventuell Kabelverbindungen lose sind.
Der Laserstrahl wird aktiviert, jedoch das Symbol nicht decodiert.	Der Scanner ist für den betreffenden Barcode-Typ nicht programmiert.	Stellen Sie sicher, dass das Gerät so programmiert wurde, dass es den Barcode-Typ, der gescannt werden soll, auch lesen kann.

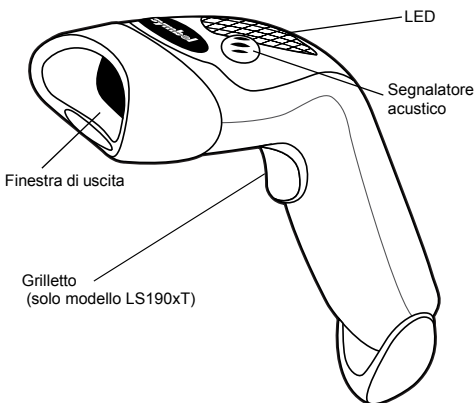
Problem	Mögliche Ursache	Mögliche Lösungen
(Forts.)	Der Barcode ist unleserlich.	Überprüfen Sie das Symbol auf Deformationen. Versuchen Sie, Testsymbole desselben Code-Typs zu scannen.
	Der Abstand zwischen Scanner und Barcode ist nicht korrekt.	Bewegen Sie den Scanner dichter an den Barcode.
Das Symbol wird decodiert, jedoch nicht an den Host übertragen.	Der Scanner ist für den betreffenden Host-Typ nicht programmiert.	Programmieren Sie ggf. den Scanner auf den betreffenden Barcode-Typ.
Die gescannten Daten werden am Host nicht korrekt angezeigt.	Der Scanner ist für ein Zusammenwirken mit dem Host nicht programmiert. Überprüfen Sie die Hostparameter bzw. die Bearbeitungsoptionen für die Serie LS1900.	<p>Überzeugen Sie sich davon, dass Sie mit dem richtigen Host arbeiten.</p> <p>Stellen Sie bei Verwendung einer RS-232-Schnittstelle sicher, dass die Kommunikationsparameter des Scanners mit den Hosteinstellungen übereinstimmen.</p> <p>Wenn Sie mit einer Tastaturweiche arbeiten, muss sichergestellt sein, dass das System für den richtigen Tastaturtyp programmiert und die Feststelltaste deaktiviert ist</p> <p>Vergewissern Sie sich davon, dass die Bearbeitungsoptionen (beispielsweise die Umwandlung von UPC-E in UPC-A) ordnungsgemäß programmiert sind.</p>

Introduzione

Lo scanner Serie LS1900, che riunisce eccellenti prestazioni di scansione con una linea ergonomica avanzata, è un ottimo scanner laser leggero. Usato come scanner portatile o in modalità "a mani libere" mediante l'uso del supporto, lo scanner Serie LS1900 garantisce confort e minimo sforzo all'operatore anche nel caso di turni di lunga durata.

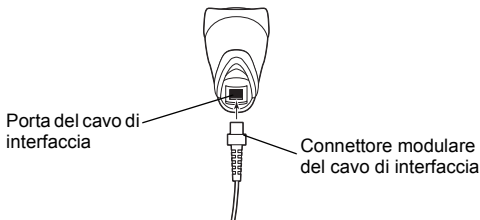
Nota : A meno che non sia specificato diversamente, il termine LS190xx si riferisce a tutte le versioni dello scanner.

Le parti dello scanner Serie LS1900



Installazione del cavo di interfaccia

1. Inserire il connettore modulare del cavo di interfaccia nella relativa porta, nella parte inferiore del manico dello scanner Serie LS1900



Serie L S 1 9 0 0

2. Collegare l'altra estremità del cavo di interfaccia all'host.
3. Collegare il cavo all'alimentazione, se necessario.
4. Eseguire la scansione del codice o dei codici a barre riportati a pagina 33 per comunicare con l'host.

Rimozione del cavo di interfaccia

Scollegare il connettore modulare del cavo premendo il fermaglio del connettore con la punta di un cacciavite.

Mira

Nota : Lo scanner funziona meglio quando non è esattamente perpendicolare al codice a barre.



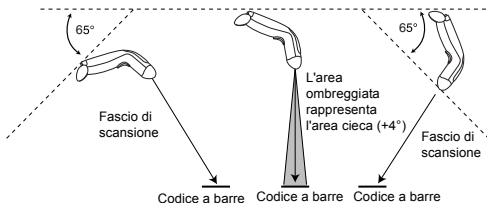
1. Scansione con esito positivo



2. Possibile riflessione speculare



3. Scansione con esito positivo



Modalità di scansione portatile

1. Assicurarsi che tutte le connessioni siano ben fatte.
2. Mirare con lo scanner verso il codice a barre. Se lo scanner ha un grilletto, puntare lo scanner e premere il grilletto.
3. Assicurarsi che la linea di scansione intersechi ciascuna barra o spazio del simbolo.

CORRETTO



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ERRATO

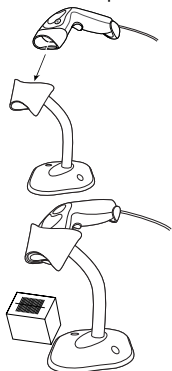


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4. Dopo la decodifica con esito positivo, lo scanner emette un segnale acustico e il LED assume il colore verde.

Modalità di scansione “a mani libere”

Quando è inserito nel supporto, lo scanner si pone automaticamente in modalità “sempre attiva”. Quando lo scanner viene tolto dal supporto, torna a funzionare nella sua modalità di default, ossia, a seconda del modello, in modalità sempre attiva o “con grilletto”.



1. Inserire lo scanner nel supporto.
2. Presentare il codice a barre e assicurarsi che la linea di scansione incroci ogni barra e ogni spazio del simbolo.
3. Dopo la decodifica con esito positivo, lo scanner emette un segnale acustico e il LED assume il colore verde.

Risoluzione dei problemi

Problema	Possibile causa	Possibile soluzione
Quando si eseguono le istruzioni d'uso, non accade nulla.	Lo scanner non riceve alimentazione.	Controllare l'alimentazione del sistema. Verificare il collegamento dell'alimentazione se questa è richiesta dalla configurazione.
	La connessione dei cavi di interfaccia/ alimentazione è difettosa.	Controllare se la connessione del cavo è difettosa.
Il laser è attivo, ma il simbolo non viene decodificato.	Lo scanner non è programmato per leggere il tipo di codice a barre sottoposto.	Assicurarsi che lo scanner sia programmato in modo da leggere il tipo di simbologia desiderata.

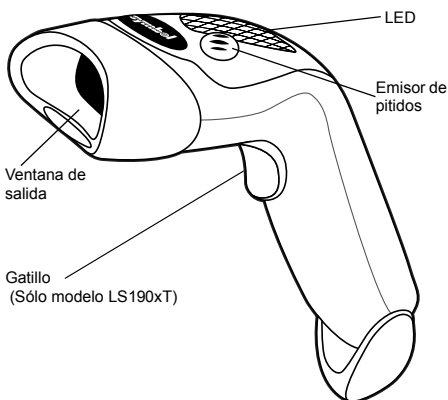
Problema	Possibile causa	Possibile soluzione
(cont.)	Il codice a barre è illeggibile.	Controllare il simbolo per assicurarsi che non sia danneggiato. Eseguire la lettura di altri simboli appartenenti alla stessa simbologia.
	La distanza tra lo scanner e il codice a barre non è corretta.	Avvicinare lo scanner al codice a barre.
Il simbolo viene decodificato ma non viene trasmesso all'host.	Lo scanner non è programmato per il corretto tipo di host.	Eseguire la lettura del codice a barre del tipo di host corretto.
I dati letti vengono visualizzati in modo errato sull'host.	Lo scanner non è programmato per funzionare con l'host. Verificare le opzioni o i parametri del tipo di host dello scanner Serie LS1900.	Assicurarsi che sia selezionato l'host corretto. Per RS-232, assicurarsi che i parametri di comunicazione dello scanner corrispondano alle impostazioni dell'host. Per la configurazione keyboard wedge, assicurarsi che il sistema sia programmato per il tipo di tastiera corretto e che il tasto BLOC MAIUSC non sia inserito. Assicurarsi che le opzioni di modifica (ad esempio la conversione da UPC-E a UPC-A) siano programmate correttamente.

Introducción

El scanner de la serie LS1900 combina un excelente rendimiento de lectura con una ergonomía avanzada para ofrecer el mejor valor en un scanner láser ligero. Tanto si se utiliza como scanner de mano o en modo manos libres sobre un mostrador, el LS1900 asegura un uso sencillo y cómodo durante largos períodos de tiempo.

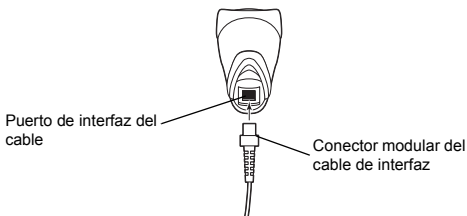
Nota: A menos que se indique lo contrario, el término LS190xx se refiere a todas las versiones del scanner.

Partes del scanner de la serie LS1900



Instalación del cable de interfaz

1. Enchufe el conector modular del cable de interfaz al puerto de interfaz del cable situado en la base del mango del LS1900.



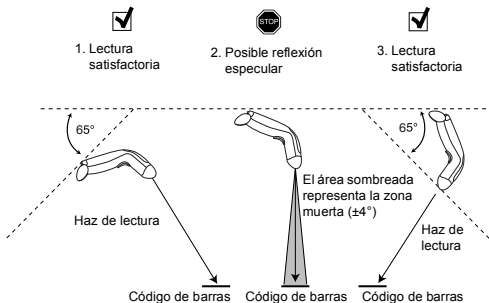
2. Conecte el otro extremo del cable de interfaz al host.
3. Conecte la fuente de alimentación al cable (si es necesario).
4. Realice una lectura del código(s) de barras apropiados que comienzan en la página 33 para establecer la comunicación con el host.

Extracción del cable de interfaz

Desconecte el conector modular del cable instalado apretando la lengüeta del conector con la punta de un destornillador.

Apuntado

Nota: El scanner ofrece un mayor rendimiento cuando no está situado exactamente en dirección perpendicular al código de barras.



Lectura en modo manual

1. Revise todas las conexiones.
2. Apunte el scanner hacia el código de barras. (Si su scanner tiene gatillo, apunte el scanner y presione el gatillo.)
3. Compruebe que la línea de lectura cruce todas las barras y espacios del símbolo.

CORRECTO



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INCORRECTO

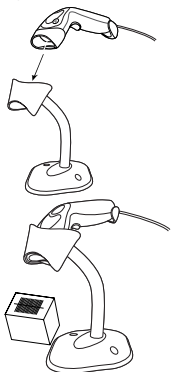


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4. Si la decodificación es satisfactoria, el scanner emite un pitido y el LED se ilumina en verde.

Lectura en modo manos libres

El scanner estará continuamente encendido cuando está colocado en el mostrador. Al retirar el scanner del mostrador, funcionará en el modo manual normal (por ejemplo, modo encendido continuo o modo con gatillo, según el modelo).



1. Coloque el scanner en el mostrador.
2. Exponga el código de barras y compruebe que la línea de lectura cruce todas las barras y espacios del símbolo.
3. Si la decodificación es satisfactoria, el scanner emitirá un pitido y el LED se iluminará en verde.

Solución de problemas

Problema	Causa posible	Soluciones posibles
No ocurre nada al seguir las instrucciones de funcionamiento.	El scanner no recibe alimentación.	Compruebe la alimentación del sistema. Compruebe que la fuente de alimentación esté conectada, si su configuración necesita una fuente de alimentación.
	Los cables de interfaz/ alimentación están sueltos.	Compruebe que las conexiones de cables no estén sueltas.
El láser se enciende pero no decodifica.	El scanner no está programado para el tipo adecuado de código de barras.	Asegúrese de que el scanner esté programado para leer el tipo de código de barras que está intentando leer.

Problema	Causa posible	Soluciones posibles
(cont.)	El código de barras es ilegible.	Compruebe que el código no esté desfigurado. Trate de leer códigos de barras de prueba con el mismo tipo de código.
	La distancia entre el scanner y el código de barras es incorrecta.	Acerque el scanner al código de barras.
El código de barras está decodificado pero no se transmite al host.	El scanner no está programado para el tipo de host adecuado.	Realice una lectura del código de barras del tipo de host adecuado.
Los datos leídos están mal presentados en el host.	El scanner no está programado para trabajar con el host. Compruebe los parámetros o las opciones de edición del tipo de host del LS1900.	<p>Verifique que el host adecuado esté seleccionado.</p> <p>Para RS-232, compruebe que los parámetros de comunicación del scanner coincidan con la configuración del host.</p> <p>Para la configuración de la emulación de teclado, compruebe que el sistema esté programado para el tipo de teclado adecuado, y que la tecla Bloq Mayús esté desactivada.</p> <p>Asegúrese de que las opciones de edición estén correctamente programadas (por ejemplo, conversión UPC-E a UPC-A).</p>

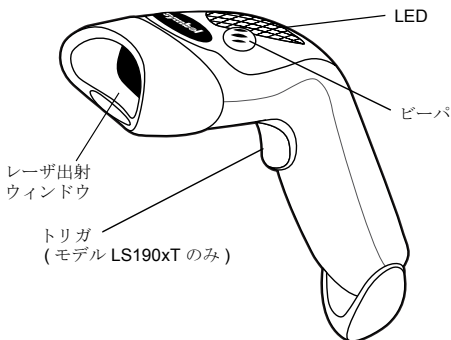
ク イ ッ ク リ フ ァ レ ン ス

はじめに

LS1900 シリーズ スキャナは、高度なスキャン性能と優れた操作性を兼ね備えた価値ある軽量レーザ スキャナです。ハンドヘルドスキャナとしても、スタンドに立ててハンドフリーモードでも、LS1900 シリーズは長時間使用しても違和感なく楽に使用できます。

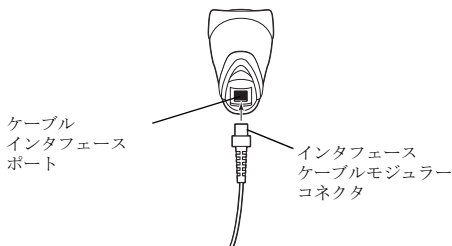
注： 特記事項がない限り、本書で LS190xx と表記されている記述は、スキャナの全バージョンに該当します。

LS1900 シリーズ スキャナの各部名称



インタフェース ケーブルを接続する

1. インタフェース ケーブル モジュラーコネクタを LS1900 シリーズのハンドル底部にあるケーブル インタフェース ポートに接続します。



2. インタフェース ケーブルのもう一端をホストに接続します。
3. 外部電源を使用する場合は、電源をケーブルに接続します。
4. 33 ページ から、ホストと通信するための適切なバーコードをスキャンします。

インタフェース ケーブルを取り外す

ドライバなど、先端の尖ったツールでコネクタクリップを押し込み、接続されているケーブルのモジュラーコネクタを外します。

読取り操作

注： スキャナをバーコードの正面に対して直角に向けてスキャンしないでください。



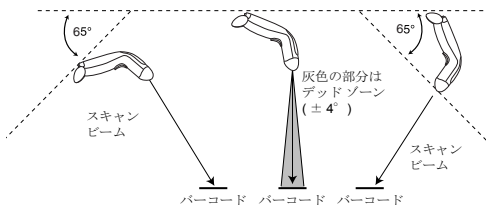
1. 正しいスキャン



2. 鏡面反射の可能性



3. 正しいスキャン



ハンドヘルド モードでのスキャン

1. ケーブルなどが確実に接続されていることを確認します。
2. スキャナをバーコードに向けます (スキャナがトリガ式の場合は、スキャナを向けてトリガを引きます)。
3. スキャンラインがバーコード全体を横切るようにスキャンします。

正しい操作



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間違った操作

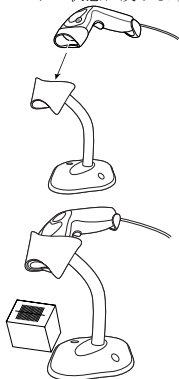


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4. 正しくデコードできた場合は、スキャナからピープ音が鳴り、LED が緑に変わります。

ハンドフリーモードでのスキャン

スタンド上では、スキャナは常時オン状態です。スタンドから外すと、スキャナは通常のハンドヘルドモードに戻ります（スキャナのモデルによって、常時オンモード、もしくはトリガモードの状態に戻ります。）



1. スキャナをスタンドにセットします。
2. バーコードをかざし、スキャンラインがバーコード全体を横切るようにスキャンします。
3. 正しくデコードできた場合は、スキャナからビープ音が鳴り、LEDが緑に変わります。

トラブルシューティング

症状	考えられる原因	措置
操作手順に従っても、全く反応を示さない。	スキャナの電源が入っていません。	システムの電源を確認してください。電源が必要な構成の場合は、電源が正しく接続されていることを確認します。
	インタフェース / 電源ケーブルの接続が不完全です。	ケーブルがゆるんでいないか確認してください。
レーザは出射されるが、バーコードを読み取らない。	読み取るバーコードの種類が正しく設定されていません。	スキャンするバーコードタイプを読み取れるようにスキャナを設定してください。



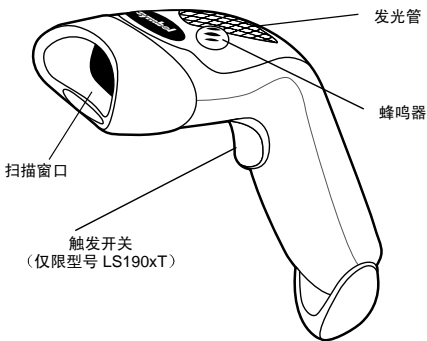
症状	考えられる原因	措置
レーザは出射されるが、バーコードを読み取らない。	バーコードの状態に問題があります。	バーコードに傷、汚れなどによるダメージがないかどうか確認します。同じバーコードタイプのテストシンボルをスキャンしてみてください。
	スキャナとバーコード間の距離が適切でない。	バーコードの大きさに合わせてスキャナを近づけたり、遠ざけたりしてください。
読み取ったバーコードデータがホストに転送されない。	スキャナが、接続するホストタイプ用に正しく設定されていません。	適切なホストタイプバーコードをスキャンしてください。
スキャンしたバーコードデータが正しくホストに転送されない。	スキャナが、接続するホスト用に設定されていません。LS1900シリーズのホストタイプパラメータおよび編集オプションを確認してください。	正しいホストが選択されていることを確認してください。 RS-232 の場合、スキャナの通信パラメータがホストの設定と一致する必要があります。 Keyboard Wedge 構成では、システムが正しいキーボードタイプに設定され、CAPS LOCK キーがオフになっていなければなりません。 編集オプション (UPC-E/UPC-A 変換など) を正しく設定してください。

简介

LS1900 系列扫描器集出色的扫描性能与先进的人体工程学于一体，充分体现了轻型激光扫描器的价值所在。无论是手持式还是置于支架上的免提式扫描器，LS1900 系列均可保证长时间使用时既轻松又舒适。

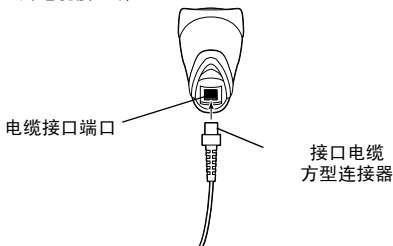
注：除非另有说明，LS190xx 指所有型号的扫描器。

LS1900 系列扫描器部件



安装接口电缆

1. 将接口电缆方型连接器插入 LS1900 系列手柄底部的电缆接口端口。



2. 将接口电缆的另一端连接到主机。
3. 将电缆接至电源（如有必要）。
4. 从第 33 页开始对相应条码进行扫描，以与主机通讯。



拔出接口电缆

用螺丝刀头按住连接器夹子，拔出已插入的电缆方型连接器。

瞄准

注：扫描器与条码不完全垂直时效果最佳。



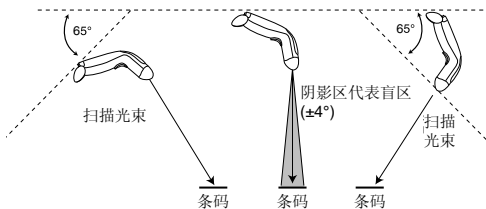
1. 扫描成功



2. 可能的镜面反射



3. 扫描成功



手持模式扫描

1. 请确保所有连接均牢固。
2. 将扫描器对准条码。（如果扫描器有触发开关，则将扫描器对准条码，然后按下触发开关）。
3. 请确保扫描线扫过符号的所有条形及空格。

正确



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错误

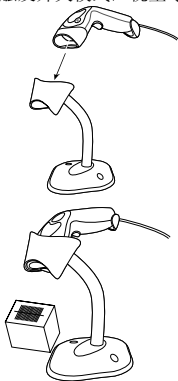


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4. 成功解码后，扫描器会发出蜂鸣声且发光管发出绿光。

免提模式扫描

当置于支架上时，扫描器处于持续模式。若将扫描器从支架上移开，它将以正常的手持模式运行（例如，持续模式或触发开关模式，视型号而定）。



1. 将扫描器放入支架。
2. 瞄准条码，确保扫描线扫过符号的所有条形及空格。
3. 成功解码后，扫描器会发出蜂鸣声且发光管发出绿光。

故障排除

问题	可能原因	可能的解决办法
如果遵循操作说明，不会发生问题。	扫描器未接通电源。	检查系统电源。如果扫描器配置需要电源，则应确保已连接完毕。
	接口 / 电源电缆松动。	检查电缆连接是否松动。
激光出现但符号未解码。	没有将扫描器编程为适用于该条码类型的程序。	确保已将扫描器编程为能够读取待扫描条码类型。
	条码符号不可读。	检查符号以确保其未受损伤。试着扫描相同条码类型的测试符号。
	扫描器与条码的距离不合适。	将扫描器移近条码。



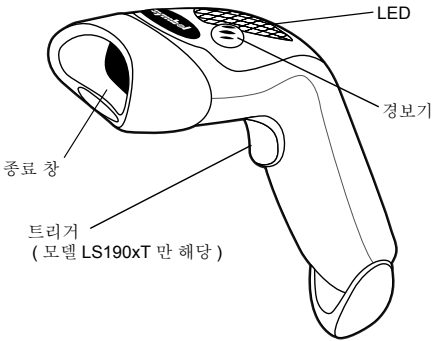
问题	可能原因	可能的解决办法
符号解码完成，但未传至主机。	没有将扫描器编程为适用于该主机类型的程序。	扫描相应的主机类型条码。
扫描数据在主机上显示有误。	没有将扫描器编程为能与主机协同工作的程序。检查 S1900 系列主机类型参数或编辑选项。	<p>请确保选择了正确的主机。</p> <p>对于 RS-232，应确保扫描器的通讯参数与主机设置相匹配。</p> <p>对于键盘仿真配置，应确保为系统编制了适用于键盘类型的程序，并且 CAPS LOCK 键处于关闭状态。</p> <p>确保为编辑选项（例如，从 UPC-E 到 UPC-A 的转换）正确编制了程序。</p>

소개

LS1900 시리즈 스캐너는 뛰어난 스캔 성능과 고급 인체 공학 기술이 결합된 초경량 레이저 스캐너로 최상의 가치를 제공합니다. LS1900 시리즈는 휴대용 스캐너로 사용하거나 스탠드에서 핸드스-프리 모드에서 사용할 때 모두 장시간 사용 시에도 편안하고 편리합니다.

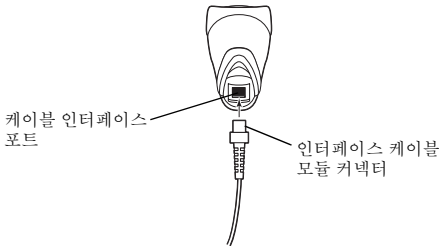
주: 달리 언급하지 않는 한 LS190xx 은 모든 스캐너 버전을 나타냅니다.

LS1900 시리즈 스캐너의 부품



인터페이스 케이블 설치하기

1. 인터페이스 케이블 모듈 커넥터를 LS1900 시리즈 손잡이 밑에 있는 케이블 인터페이스 포트에 꽂습니다.



2. 인터페이스 케이블의 다른 끝을 호스트에 연결합니다.
3. 전원 공급 장치를 케이블에 연결합니다 (필요한 경우).
4. 33 쪽에서 시작되는 설명대로 적절한 바코드를 스캔하여 호스트와 통신합니다.

인터페이스 케이블 제거하기

스크루 드라이버 끝으로 커넥터 고정핀을 눌러 설치된 케이블의 모듈 커넥터를 뺍니다.

조준

주: 스캐너는 바코드에 완전히 수직으로 조준하지 않아야 잘 작동됩니다.



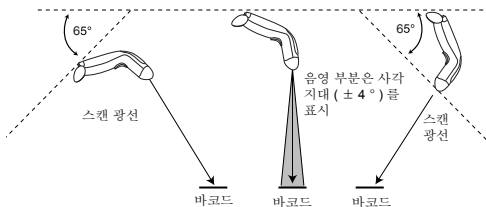
1. 바코드 스캔 성공



2. 가능한 거울 반사 영역



3. 바코드 스캔 성공



휴대용 모드에서 스캔하기

1. 모든 연결 부분이 단단히 고정되어 있는지 확인합니다.
2. 스캐너를 바코드에 조준합니다. (스캐너에 트리거가 있는 경우 스캐너를 조준하고 트리거를 누릅니다.)
3. 레이저 스캔 라인이 바코드 심볼의 모든 바와 여백을 통과하도록 스캔합니다.

올바름



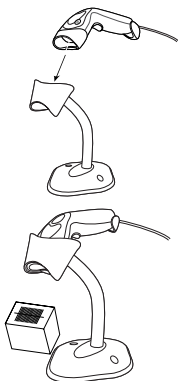
틀림



4. 바코드가 정확하게 읽히면, 스캐너는 경고음을 내며 LED가 녹색으로 바뀝니다.

핸즈 - 프리 모드에서 스캔하기

스탠드에 있는 스캐너는 항상 켜짐 모드 상태입니다. 스탠드에서 스캐너를 제거하면 일반 휴대용 모드 (즉, 모델에 따라 항상 켜짐 모드나 트리거 모드가 작동)에서 작동합니다.



1. 스캐너를 스탠드에 끼웁니다.
2. 스캔할 바코드를 준비합니다. 레이저 스캔 라인이 바코드 심볼의 모든 바와여백을 통과하도록 스캔합니다.
3. 바코드가 정확하게 읽히면, 스캐너는 경고음을 내며 LED가 녹색으로 바뀝니다.

문제 해결

문제	가능한 원인	가능한 해결 방안
작동 방법을 따라해도 아무런 일이 일어나지 않습니다.	스캐너 전원이 켜져 있지 않습니다.	시스템 전원을 확인하십시오. 전원 공급장치가 필요한 구성 조건인 경우 전원 공급장치가 연결되어 있는지 확인하십시오.
	인터페이스 / 전원 케이블이 느슨합니다.	느슨한 케이블 연결부를 확인하십시오.



문제	가능한 원인	가능한 해결 방안
레이저는 켜져 있지만 바코드 심볼을 해독하지 못합니다.	스캐너가 해당 바코드 형식에 맞지 않게 프로그램되어 있습니다.	스캐너가 스캔 중인 바코드 형식에 맞게 프로그램되어 있어야 합니다.
	바코드 심볼을 읽을 수 없습니다.	바코드 심볼의 표면이 손상되지 않았는지 확인하십시오. 동일한 형식의 바코드 심볼을 스캔해 보십시오.
	스캐너와 바코드 사이의 거리가 올바르지 않습니다.	스캐너를 바코드에 더 가까이 대십시오.
바코드 심볼은 해독되었지만 호스트로 전송되지 않습니다.	스캐너가 해당 호스트 종류에 맞게 프로그램되어 있지 않습니다.	적절한 호스트 형식의 바코드를 스캔하십시오.
스캔한 데이터가 호스트에 올바르게 표시되지 않습니다.	스캐너가 호스트와 작동하도록 프로그램되어 있지 않습니다. LS1900 시리즈의 호스트 종류 매개변수 또는 편집 옵션을 확인하십시오.	적절한 호스트가 선택되었는지 확인하십시오. RS-232의 경우, 스캐너의 통신 매개변수가 호스트의 설정과 일치하는지 확인하십시오. 키보드 웨지 구성의 경우 시스템이 올바른 키보드 종류로 프로그램되었으며 CAPS LOCK 키가 꺼져 있는지 확인하십시오. 편집 옵션 (예: UPC-E에서 UPC-A로의 변환)이 적절히 프로그램되었는지 확인하십시오.

Programming Bar Codes

Following are some frequently used programming bar codes.

Note: For additional host types, refer to the *LS1900 Series Product Reference Guide*, p/n 72-50930-xx, available on the LS1900 Series CD.

Set Defaults

Scanning this bar code sets all parameters to their default values.



Host Type

If you are using a Synapse cable (e.g., a part number STlxx-xxxx), the scanner autodetects the type of host you are using, so you do not need to scan bar codes. If not, select an RS-232, Keyboard, or Wand host from the following bar code menus.

RS-232 Host Types



L S 1 9 0 0 S e r i e s

QRG

RS-232 Host Types



NIXDORF RS-232C MODE A



NIXDORF RS-232C MODE B



FUJITSU RS-232C



OPOS

Q u i c k R e f e r e n c e

Keyboard Host Type



IBM PS/2

Country Codes



AMERICAN



FRENCH



FRENCH INTERNATIONAL

LS1900 Series

QRG

Country Codes



GERMAN



SPANISH



ITALIAN



SWEDISH

Q u i c k R e f e r e n c e

Country Codes



UK ENGLISH



JAPANESE

Wand Host Type



SYMBOL WAND

Ergonomic Recommendations

Caution: In order to avoid or minimize the potential risk of ergonomic injury follow the recommendations below. Consult with your local Health & Safety Manager to ensure that you are adhering to your company's safety programs to prevent employee injury.

- Reduce or eliminate repetitive motion
- Maintain a natural position
- Reduce or eliminate excessive force
- Keep objects that are used frequently within easy reach
- Perform tasks at correct heights
- Reduce or eliminate vibration
- Reduce or eliminate direct pressure
- Provide adjustable workstations
- Provide adequate clearance
- Provide a suitable working environment
- Improve work procedures.

Regulatory Information

Radio Frequency Interference Requirements

This device has been tested and found to comply with the limits for a Class B digital device pursuant to Part 15 of the Federal Communications Commissions Rules and Regulation. 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.

However, there is no guarantee that interference will not occur in a particular installation. If the equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

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

Q u i c k R e f e r e n c e

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

This device complies with FCC Part 15. 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.

Radio Frequency Interference Requirements - Canada

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

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

CE Marking and European Union Compliance



Products intended for sale within the European Union are marked with the CE Mark which indicates compliance to applicable Directives and European Normes (EN), as follows.

Amendments to these Directives or ENs are included:

Applicable Directives

- Electromagnetic Compatibility Directive 89/336/EEC
- Low Voltage Directive 73/23/EEC

Applicable Standards

- EN 55022:1998, Limits and Methods of Measurement of Radio Disturbance Characteristics of Information Technology Equipment
- EN 55024:1998; Information Technology equipment - Immunity characteristics - Limits and methods of measurement
- IEC 1000-4-2:1995; Electromagnetic compatibility (EMC); Part 4: Testing and measurement techniques; Section 4.2: Electrostatic discharge immunity test
- IEC 1000-4-3:1997; Electromagnetic Compatibility (EMC); Part 4: Testing and measurement techniques; Section 3. Radiated, radio frequency, electromagnetic field immunity test.
- IEC 1000-4-4:1995; Electromagnetic compatibility (EMC); Part 4: Testing and measurement techniques; Section 4: Testing electrical fast transient, /Burst immunity.

- IEC1000-4-5:1995; Electromagnetic compatibility (EMC), Part 4: Testing and measurement techniques; Section 5: Surge Immunity
- IEC 1000-4-6:1996; Electromagnetic compatibility (EMC), Part 4: Testing and measurement techniques; Section 6: Immunity to conducted disturbances, induced by radio frequency fields.
- IEC 1000-4-11:1994; Electromagnetic compatibility (EMC), Part 4: Testing and measurement techniques; Section 11: Voltage Dips, Short Interruptions, and Voltage Variations.
- EN 60 950 + A1+A2+A3+A4+A11 - Safety of Information Technology Equipment Including Electrical Business Equipment
- EN 60 825-1 (EN 60 825) - Safety of Devices Containing Lasers

Laser Devices

Symbol products using lasers comply with US 21CFR1040.10, and IEC825-1:1993, EN60825-1:1994+A11:1996. The laser classification is marked on one of the labels on the product.

Class 1 Laser devices are not considered to be hazardous when used for their intended purpose. The following statement is required to comply with US and international regulations:

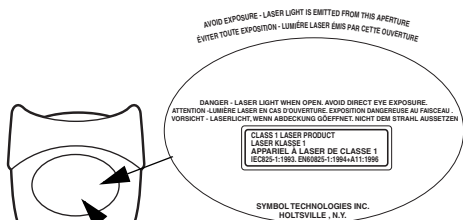
Caution: Use of controls, adjustments or performance of procedures other than those specified herein may result in hazardous laser light exposure.

Class 2 laser scanners use a low power, visible light diode. As with any very bright light source, such as the sun, the user should avoid staring directly into the light beam.

Momentary exposure to a Class 2 laser is not known to be harmful.

Scanner Labeling

For Class 1 Laser Products:



For Class 2 Laser Products:



LS1900 Series

In accordance with Clause 5, IEC 0825 and EN60825, the following information is provided to the user:



ENGLISH		HEBREW		
CLASS 1	CLASS 1 LASER PRODUCT		מוצר לייזר רמה 1	רמה 1
CLASS 2	LASER LIGHT DO NOT STARE INTO BEAM CLASS 2 LASER PRODUCT		אור לייזר אין להביט אל תוך הזרם מוצר לייזר רמה 2	רמה 2
DANISH / DANSK		ITALIAN / ITALIANO		
KLASSE 1	KLASSE 1 LASERPRODUKT	CLASSE 1	PRODOTTO AL LASER DI CLASSE 1	
KLASSE 2	LASERLYF SE IKKE IND I STRÅLEN KLASSE 2 LASERPRODUKT	CLASSE 2	LUCE LASER NON FISSARE IL RAGGIOPRODOTTO AL LASER DI CLASSE 2	
DUTCH / NEDERLANDS		NORWEGIAN / NORSK		
KLASSE 1	KLASSE-1 LASERPRODUKT	KLASSE 1	LASERPRODUKT, KLASSE 1	
KLASSE 2	LASERLICHT NIET IN STRAAL STAREN KLASSE-2 LASERPRODUKT	KLASSE 2	LASERLYS IKKE STIRR INN I LYSSTRÅLEN LASERPRODUKT, KLASSE 2	
FINNISH / SUOMI		PORTUGUESE / PORTUGUÊS		
LUOKKA 1	LUOKKA 1 LASERTUOTE	CLASSE 1	PRODUTO LASER DA CLASSE 1	
LUOKKA 2	LASERVALO ÄLÄ TUJOTA SÄDETTÄ LUOKKA 2 LASERTUOTE	CLASSE 2	LUZ DE LASER NÃO FIXAR O RAIJO LUMINOSO PRODUTO LASER DA CLASSE 2	
SPANISH / ESPAÑOL		FRENCH / FRANÇAIS		
CLASE 1	PRODUCTO LASER DE LA CLASE 1	CLASSE 1	PRODUIT LASER DE CLASSE 1	
CLASE 2	LUZ LASER NO MIRE FIJAMENTE EL HAZ PRODUCTO LASER DE LA CLASE 2	CLASSE 2	LUMIERE LASER NE PAS REGARDER LE RAYON FIXEMENT PRODUIT LASER DE CLASSE 2	
GERMAN / DEUTCH				
KLASSE 1	LASERPRODUKT DER KLASSE 1			
KLASSE 2	LASERSTRAHLEN NICHT DIREKT IN DEN LASERSTRAHL SCHAUEN LASERPRODUKT DER KLASSE 2			
SWEDISH / SVENSKA				
KLASS 1	LASERPRODUKT KLASS 1			
KLASS 2	LASERLJUS STIRRA INTE MOT STRÅLEN LASERPRODUKT KLASS 2			

Q u i c k R e f e r e n c e

LS 1900 Series

The logo for QRG is rendered in a large, light gray, serif font. The letters 'Q', 'R', and 'G' are significantly larger than the 'S' characters. The 'Q' has a long, sweeping tail that extends downwards and to the left. The 'R' and 'G' are also large and feature classic serif details.

Q u i c k R e f e r e n c e

Warranty

Symbol Technologies, Inc. ("Symbol") manufactures its hardware products in accordance with industry-standard practices. Symbol warrants that for a period of five (5) years from date of shipment, products will be free from defects in materials and workmanship.

This warranty is provided to the original owner only and is not transferable to any third party. It shall not apply to any product (i) which has been repaired or altered unless done or approved by Symbol, (ii) which has not been maintained in accordance with any operating or handling instructions supplied by Symbol, (iii) which has been subjected to unusual physical or electrical stress, misuse, abuse, power shortage, negligence or accident or (iv) which has been used other than in accordance with the product operating and handling instructions. Preventive maintenance is the responsibility of customer and is not covered under this warranty.

Wear items and accessories having a Symbol serial number will carry a 90-day limited warranty. Non-serialized items will carry a 30-day limited warranty.

Warranty Coverage and Procedure

During the warranty period, Symbol will repair or replace defective products returned to Symbol's manufacturing plant in the US. For warranty service in North America, call the Symbol Support Center at 1-800-653-5350.

International customers should contact the local Symbol office or support center. If warranty service is required, Symbol will issue a Return Material Authorization Number. Products must be shipped in the original or comparable packaging, shipping and insurance charges prepaid. Symbol will ship the repaired or replacement product freight and insurance prepaid in North America. Shipments from the US or other locations will be made F.O.B. Symbol's manufacturing plant.

Symbol will use new or refurbished parts at its discretion and will own all parts removed from repaired products. Customer will pay for the replacement product in case it does not return the replaced product to Symbol within 3 days of receipt of the replacement product. The process for return and customer's charges will be in accordance with Symbol's Exchange Policy in effect at the time of the exchange.

Customer accepts full responsibility for its software and data including the appropriate backup thereof.

Repair or replacement of a product during warranty will not extend the original warranty term.

Symbol's Customer Service organization offers an array of service plans, such as on-site, depot, or phone support, that can be implemented to meet customer's special operational requirements and are available at a substantial discount during warranty period.

General

Except for the warranties stated above, Symbol disclaims all warranties, express or implied, on products furnished hereunder, including without limitation implied warranties of merchantability and fitness for a particular purpose. The stated express warranties are in lieu of all obligations or liabilities on part of Symbol for damages, including without limitation, special, indirect, or consequential damages arising out of or in connection with the use or performance of the product.

Seller's liability for damages to buyer or others resulting from the use of any product, shall in no way exceed the purchase price of said product, except in instances of injury to persons or property.

Some states (or jurisdictions) do not allow the exclusion or limitation of incidental or consequential damages, so the proceeding exclusion or limitation may not apply to you.

Service Information

Before you use the unit, it must be configured to operate in your facility's network and run your applications.

If you have a problem running your unit or using your equipment, contact your facility's Technical or Systems Support. If there is a problem with the equipment, they will contact the Symbol Support Center:

United States¹
1-800-653-5350
1-631-738-2400

Canada
905-629-7226

United Kingdom
0800 328 2424

Asia/Pacific
337-6588

Australia
1-800-672-906

Austria/Österreich
1-505-5794

Denmark/Danmark
7020-1718

Finland/Suomi
9 5407 580

France
01-40-96-52-21

Germany/Deutschland
6074-49020

Italy/Italia
2-484441

Mexico/México
5-520-1835

Netherlands/Nederland
315-271700

Norway/Norge
66810600

South Africa
11-4405668

Spain/España
9-1-320-39-09

Sweden/Sverige
84452900

Latin America Sales
Support Operations
1-800-347-0178 Inside US
+1-561-483-1275 Outside US

Europe/Mid-East Distributor Support Operations
Contact local distributor or call
+44 208 945 7360

¹Customer support is available 24 hours a day, 7 days a week.

For the latest version of this guide go to:
<http://www.symbol.com/manuals>.



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