

# RTS



EN		Publications for this product are available by scanning the barcode or visiting <a href="http://www.renishaw.com/rts">www.renishaw.com/rts</a> .	
DE		Weitere Informationen zu diesem Produkt sind unter folgendem Link <a href="http://www.renishaw.de/rts">www.renishaw.de/rts</a> abrufbar.	
ES		Las publicaciones para este producto están disponibles a través de <a href="http://www.renishaw.es/rts">www.renishaw.es/rts</a> .	
FR		Les documentations pour ce produit sont disponibles en visitant le site <a href="http://www.renishaw.fr/rts">www.renishaw.fr/rts</a> .	
IT		La documentazione per questo prodotto è disponibile visitando il sito <a href="http://www.renishaw.it/rts">www.renishaw.it/rts</a> .	
日本語		本製品に関する資料は、 <a href="http://www.renishaw.jp/rts">www.renishaw.jp/rts</a> からダウンロードいただけます。	

<b>PL</b>		Publikacje dotyczące tego produktu są dostępne w witrynie <a href="http://www.renishaw.pl/rts">www.renishaw.pl/rts</a> .	
<b>CS</b>		Dokumentaci k produktu najdete na <a href="http://www.renishaw.cz/rts">www.renishaw.cz/rts</a> .	
<b>RU</b>		Документация по данному изделию доступна на сайте <a href="http://www.renishaw.ru/rts">www.renishaw.ru/rts</a> .	
<b>中文 (繁體)</b>		請訪問雷尼紹網站以獲得此產品的的相關文件檔案: <a href="http://www.renishaw.com.tw/rts">www.renishaw.com.tw/rts</a> 。	
<b>中文 (简体)</b>		请访问雷尼绍网站以获得此产品的相关文档 <a href="http://www.renishaw.com.cn/rts">www.renishaw.com.cn/rts</a> 。	
<b>한국어</b>		이 제품의 관련 자료는 <a href="http://www.renishaw.co.kr/rts">www.renishaw.co.kr/rts</a> 에서 확인 가능 합니다.	

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## Safety

### Information to the user

The RTS is supplied with two non-rechargeable AA alkaline batteries. Lithium-thionyl chloride non-rechargeable AA batteries may also be used in the RTS; refer to the *RTS radio tool setter* installation guide (Renishaw part no. H-5646-8504). Lithium batteries must be approved to (BS EN 62133:2013 [IEC 62133:2012]). Once the charge in the batteries is depleted, do not attempt to recharge them.



The use of this symbol on the batteries, packaging or accompanying documents indicates that used batteries should not be mixed with general household waste. Please dispose of the used batteries at a designated collection point. This will prevent potential negative effects on the environment and human health which could otherwise arise from inappropriate waste handling. Please contact your local authority or waste disposal service concerning the separate collection and disposal of batteries. All lithium and rechargeable batteries must be fully discharged or protected from short circuiting prior to disposal.

Ensure replacement batteries are of the correct type and are fitted in accordance with the instructions in the installation guide; refer to the *RTS radio tool setter* installation guide (Renishaw part no. H-5646-8504) for further information. For specific battery operating, safety and disposal guidelines, refer to the battery manufacturer's literature.

- Ensure that all batteries are always inserted with the correct polarity.
- Do not store batteries in direct sunlight or rain.
- Do not expose to heat or dispose of the batteries in a fire.
- Avoid forced discharge of the battery.
- Do not short-circuit or force discharge the batteries.
- Do not disassemble, pierce, deform or apply excessive pressure to the batteries.
- Do not swallow the batteries.
- Keep the batteries out of the reach of children.
- Do not allow batteries to get wet.
- Do not mix new and used batteries or battery types, as this will result in reduced life and damage to the batteries.
- If a battery is damaged, exercise caution when handling to avoid contact with electrolyte.

Ensure that you comply with international and national battery transport regulations when transporting batteries or the products.

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**NOTE:** Lithium batteries are classified as dangerous goods and strict controls apply to their shipment by air. To reduce the risk of shipment delays, if you need to return the RTS to Renishaw for any reason, do not return any batteries.

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In all applications involving the use of machine tools, eye protection is recommended.

The RTS has a glass window. Handle with care if broken to avoid injury.

### **Information to the machine supplier/installer**

It is the machine supplier's responsibility to ensure that the user is made aware of any hazards involved during operation, including those mentioned in Renishaw product literature, and to ensure that adequate guards and safety interlocks are provided.

If the probe fails, the probe signal may falsely indicate a probe seated condition. Do not rely on probe signals to halt the movement of the machine.


### **Information to the equipment installer**

All Renishaw equipment is designed to comply with the relevant EU and FCC regulatory requirements. It is the responsibility of the equipment installer to ensure that the following guidelines are adhered to, in order for the product to function in accordance with these regulations:

- any interface **MUST** be installed in a position away from any potential sources of electrical noise (for example, power transformers, servo drives);
- all 0 V/ground connections should be connected to the machine "star point" (the "star point" is a single point return for all equipment ground and screen cables). This is very important and failure to adhere to this can cause a potential difference between grounds;
- all screens must be connected as outlined in the user instructions;
- cables must not be routed alongside high current sources (for example, motor power supply cables), or be near high-speed data lines;
- cable lengths should always be kept to a minimum.

### **Equipment operation**

If this equipment is used in a manner not specified by the manufacturer, the protection provided by the equipment may be impaired.

<b>Batteries</b> 	AA alkaline × 2	AA lithium-thionyl chloride × 2
	✓	<div style="display: flex; justify-content: space-between;"> <div style="text-align: center;">✓</div> <div> <p><b>Saft</b>      LS 14500</p> <p><b>Tadiran</b>    SL-760/S  TL-5903/S, TL-2100/S</p> <p><b>Xeno</b>        XL-060F</p> </div> </div>

**NOTE:** Maximum battery life is achieved when lithium-thionyl chloride batteries are used.

## Fitting the stylus and captive link

1



5 mm A/F (thin)  
2.5 Nm – 2.7 Nm  
(1.84 lbf.ft – 1.99 lbf.ft)

2 mm A/F  
1.0 Nm – 1.2 Nm  
(0.74 lbf.ft – 0.89 lbf.ft)

2



2 mm A/F  
1.0 Nm – 1.2 Nm  
(0.74 lbf.ft – 0.89 lbf.ft)

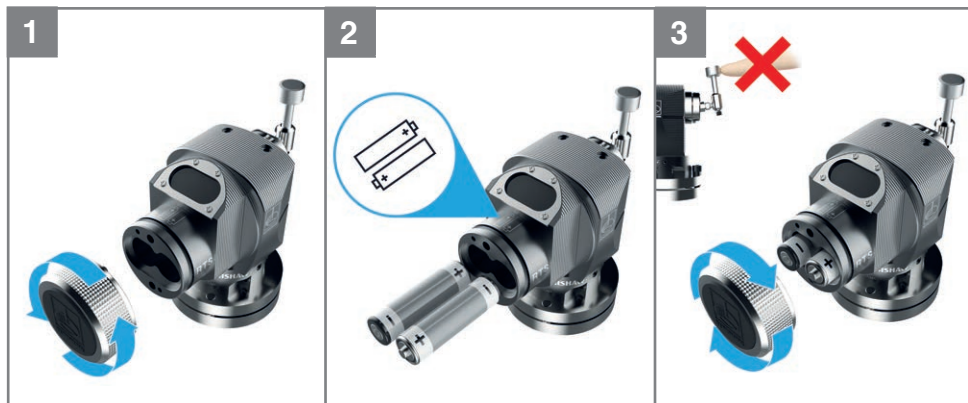
3



3 mm A/F  
2.5 Nm – 2.7 Nm  
(1.84 lbf.ft – 1.99 lbf.ft)



## Installing the batteries



**EN**

## **Configuring the probe**

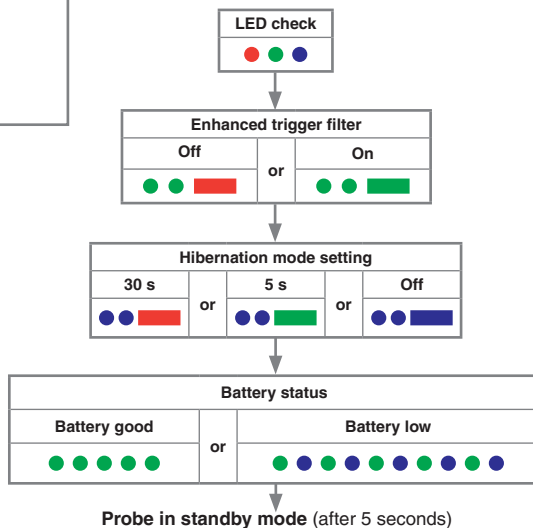
The following sections describe the process of reviewing and configuring the probe settings. The Trigger Logic™ app simplifies this process with clear, interactive instructions and informative videos. The app can also be used with radio probes for probe partnering.



## Reviewing the probe settings



Key to the symbols	
<span style="color: red;">●</span>	LED short flash
<span style="background-color: red; width: 15px; height: 10px; display: inline-block;"></span>	LED long flash



## Placing the probe in configuration mode



### Key to the symbols

● LED short flash

■ LED long flash



Deflect the stylus for less than 4 seconds to move to the next menu option.

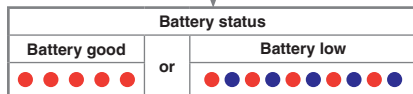


Deflect the stylus for more than 4 seconds to move to the next menu.



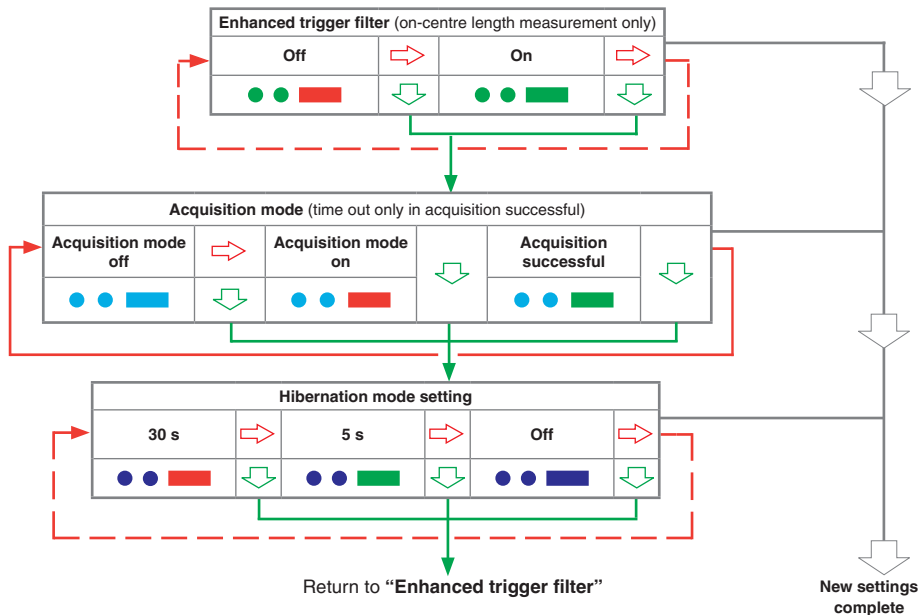
To exit, leave the stylus untouched for more than 20 seconds.

Deflect the stylus and hold it deflected until after the battery status has been displayed at the end of the review sequence.

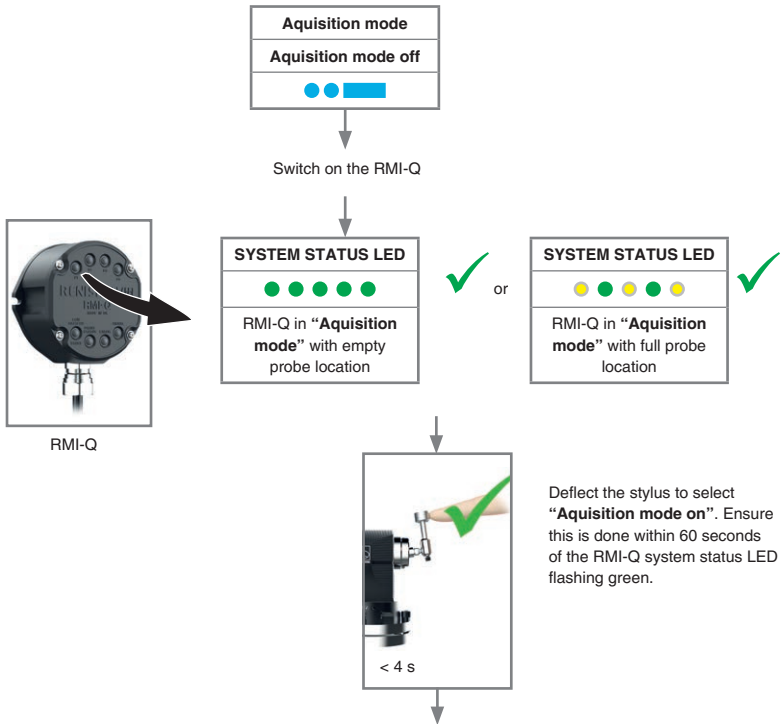


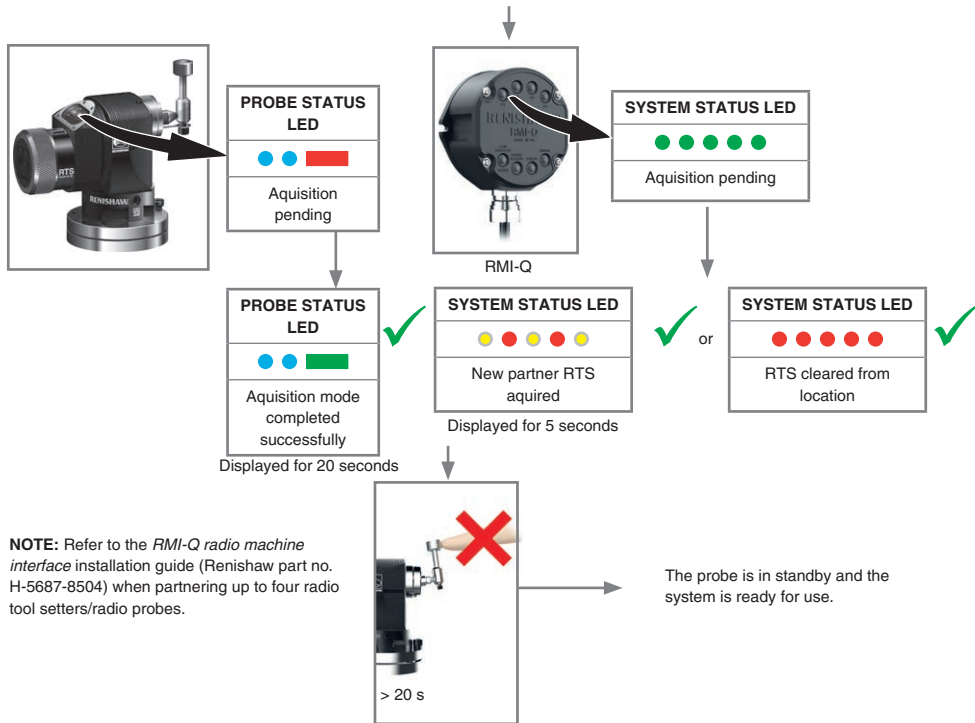
To partner the probe and/or change the probe settings, go to the next page.

## Changing the probe settings



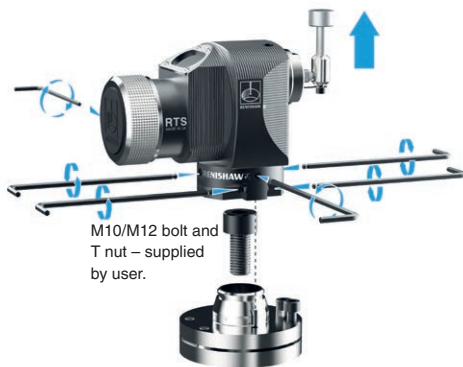
## RTS – RMI-Q partnership





## Mounting the probe on the machine table

1





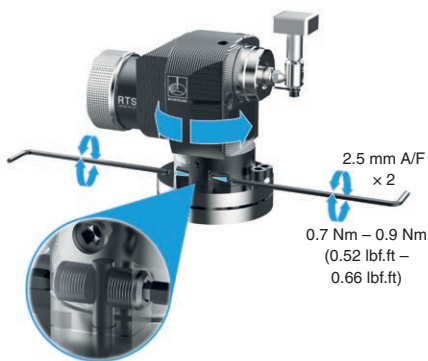
2



2.5 mm A/F  
× 4

0.7 Nm – 0.9 Nm  
(0.52 lbf.ft – 0.66 lbf.ft)

3



2.5 mm A/F  
× 2

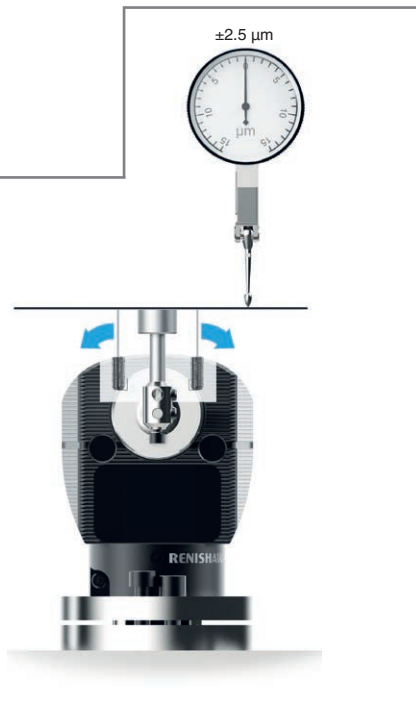
0.7 Nm – 0.9 Nm  
(0.52 lbf.ft –  
0.66 lbf.ft)

## Stylus on-centre adjustment

1

2.5 mm A/F  
× 2

0.7 Nm – 0.9 Nm  
(0.52 lbf.ft – 0.66 lbf.ft)





## Square stylus only

3



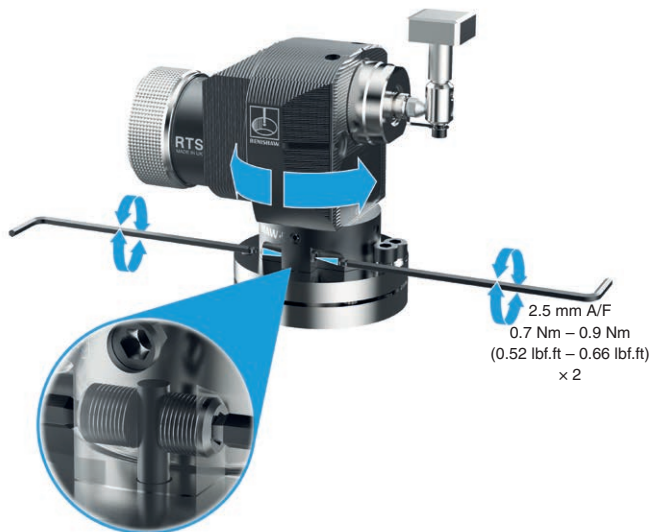
4

Slacken



5

Adjust



6

Tighten



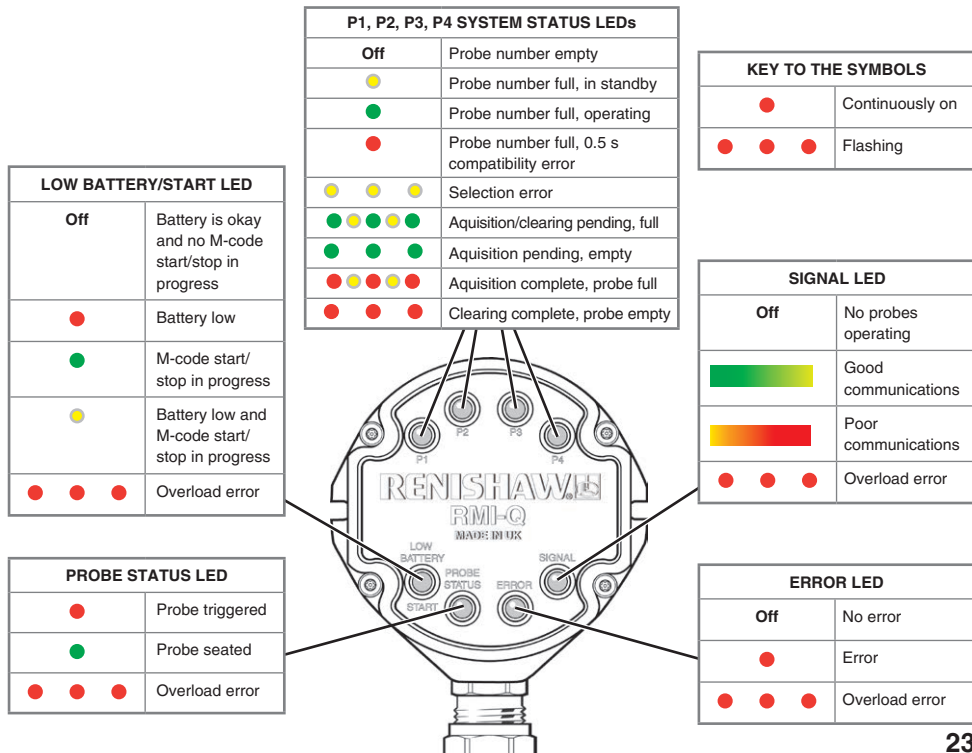
## Cleaning

Clean the window to maintain signal range.





## RMI-Q visual diagnostics



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## Warranty

Unless you and Renishaw have agreed and signed a separate written agreement, the equipment and/or software are sold subject to the Renishaw Standard Terms and Conditions supplied with such equipment and/or software, or available on request from your local Renishaw office.

Renishaw warrants its equipment and software for a limited period (as set out in the Standard Terms and Conditions), provided that they are installed and used exactly as defined in associated Renishaw documentation. You should consult these Standard Terms and Conditions to find out the full details of your warranty.

Equipment and/or software purchased by you from a third-party supplier is subject to separate terms and conditions supplied with such equipment and/or software. You should contact your third-party supplier for details.

## China RoHS

For more information, on China RoHS visit:  
[www.renishaw.com/mtpchinarohs](http://www.renishaw.com/mtpchinarohs).

## EU declaration of conformity



Renishaw plc declares under its sole responsibility that the RTS is in conformity with all relevant Union legislation.

The full text of the EU declaration of conformity is available at: [www.renishaw.com/mtpdoc](http://www.renishaw.com/mtpdoc)

## WEEE directive



The use of this symbol on Renishaw products and/or accompanying documentation indicates that the product should not be mixed with general household waste upon disposal. It is the responsibility of the end user to dispose of this product at a designated collection point for waste electrical and electronic equipment (WEEE) to enable reuse or recycling. Correct disposal of this product will help to save valuable resources and prevent potential negative effects on the environment. For more information, please contact your local waste disposal service or Renishaw distributor.

## REACH regulation

Information required by Article 33(1) of Regulation (EC) No. 1907/2006 ("REACH") relating to products containing substances of very high concern (SVHCs) is available at:

[www.renishaw.com/REACH](http://www.renishaw.com/REACH)

## FCC Information to user (USA only)

### 47 CFR Section 15.19

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.

### 47 CFR Section 15.21

The user is cautioned that any changes or modifications not expressly approved by Renishaw plc or authorised representative could void the user's authority to operate the equipment.

## Patents

Features of RTS and features of similar products are the subject of one or more of the following patents and/or patent applications:

CN 100466003	IN 215787	US 6941671
CN 101482402	JP 4237051	US 7145468
EP 1425550	JP 4575781	US 7285935
EP 1457786	JP 4773677	US 7486195
EP 1576560	JP 4851488	US 7665219
EP 1804020	JP 5238749	US 7812736
EP 1931936	JP 5390719	US 7821420
EP 2216761	KR 1001244	US 9140547
WO 2004/057552	TW I333052	

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## 安全须知

### 用户须知

RTS配有两节非充电型AA碱性电池。锂亚硫酰氟非充电型AA电池也可用于RTS；请参阅《RTS》安装指南（雷尼绍文档编号H-5646-8514）。锂电池必须符合BS EN 62133:2013 (IEC 62133:2012) 标准。电池电量耗尽之后，请勿尝试给电池充电。



在电池、包装或随附文档上使用本符号，表示废旧电池不可与普通生活垃圾混合。请在指定的收集点处置废旧电池。这样可以防止由于废品处理不当对环境 and 人类健康造成的潜在不良影响。请联系当地相关政府部门或废品处置服务商，了解电池的单独回收与处置规定。在处置前，必须使所有的锂电池和充电电池完全放电或采取防短路措施。

请确保备用电池型号正确，并按照本安装指南中的说明进行安装；详情请参阅《RTS》安装指南（雷尼绍文档编号H-5646-8514）。有关具体的电池作业、安全和处置指导原则，请参阅电池制造商的资料。

- 确保所有安装的电池正负极方向正确。
- 请勿将电池存放在阳光直射或淋雨的地方。
- 请勿将电池加热或弃入火中处置。
- 避免将电池强制放电。
- 请勿使电池短路。
- 请勿对电池进行拆解、穿透、施加过度压力，或使其变形。
- 请勿吞咽电池。
- 请将电池放在儿童无法接触的地方。
- 不要让电池受潮。
- 不要将新旧电池或不同的电池类型混用，因为这会缩短电池寿命并损坏电池。
- 如果电池损坏，请小心处理，不要触碰到电解液。

在运输电池或本产品时，应确保符合国际和国家电池运输条例。

**注：**锂电池被定义为危险品，空运有严格的控制。为了减少运输延期的风险，无论出于何种原因，若您需要将RTS返回雷尼绍，请勿包含任何电池。

在所有涉及使用机床的应用中，建议采取保护眼睛的措施。

RTS有一个玻璃窗口。如果玻璃破碎，请务必小心，以免受伤。

### 机床供应商/安装商须知

机床制造商有责任确保用户了解操作中存在的任何危险，包括雷尼绍产品说明书中所述的危险，并确保提供充分的防护装置和安全联动装置。

如果测头测量失败，则有误发测头已复位状态信号的可能。切勿单凭测头信号来停止机床运动。

### 设备安装商须知

雷尼绍所有设备的设计均符合相关的EU和FCC监管要求。为使产品按照这些规定工作，设备安装商有责任保证遵守以下指导原则：

- 任何接口的安装位置**必须**远离任何潜在的电噪声源，如变压器、伺服系统驱动装置等；
- 所有0伏/接地连接都应当连接到机床接地终端上（“接地终端”是所有设备地线和屏蔽电缆的単点回路）。这一点非常重要，不遵守此规定会造成接地之间存在电位差；
- 所有屏蔽装置都必须按使用说明中所述进行连接；
- 电缆线路不得与电机电源电缆等高电流源并行或靠近高速数据传输线；
- 电缆长度应始终保持最短。

### 设备操作

如果设备使用方式与制造商要求的方式不符，设备提供的保护功能可能会减弱。

## Radio approvals

Argentina:



CNC ID: C-13042

Australia:



Brazil:



01762-13-02812

“Este equipamento não tem direito à proteção contra interferência prejudicial e não pode causar interferência em sistemas devidamente autorizados”.

Canada: IC: 3928A-RTS

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

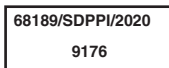
EU:



India:

2346/2012/WRLO

Indonesia:



Japan:



This device is granted pursuant to the Japanese Radio Law and the Japanese Telecommunications Business Law This device should not be modified (otherwise the granted designation number will become invalid).

Malaysia:



RAVG/78S/0513/S(13-1004)

Mexico:

ITF# RCPRETR18-0103

“La operación de este equipo está sujeta a las siguientes dos condiciones:

- (1) es posible que este equipo o dispositivo no cause interferencia perjudicial y
- (2) este equipo o dispositivo debe aceptar cualquier interferencia, incluyendo la que pueda causar su operación no deseada.”



New Zealand:



Singapore:



South Africa:



South Korea:



### Class A Equipment (Industrial Use)

이 기기는 업무용(A급) 전자파적합기기로서 판매자 또는 사용자는 이 점을 주의하시기 바라며, 가정외의 지역에서 사용하는 것을 목적으로 합니다.

Taiwan:



### 警語

經型式認證合格之低功率射頻電機,非經許可,公司、商號或使用者均不得擅自變更頻率、加大功率或變更原設計之特性及功能。

低功率射頻電機之使用不得影響飛航安全及干擾合法通信;經發現有干擾現象時,應立即停用,並改善至無干擾時方得繼續使用。

前項合法通信,指依電信法規定作業之無線電通信。低功率射頻電機須忍受合法通信或工業、科學及醫療用電波輻射性電機設備之干擾。

USA:

FCC ID: KQGRTS

Iceland Israel Liechtenstein Montenegro Norway  
Philippines Russia Switzerland Turkey

Exempt: China Thailand Vietnam

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