Quick-start guide H-5500-8550-04-A







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## Safety

#### Information to the user

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

#### 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.

Under certain circumstances, 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.

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# **HSI visual diagnostics**



# Connecting the HSI to a RENGAGE<sup>™</sup> probe and the CNC controller



No
Closed
Open

RENGAGE probe will remain in the non-triggered (seated) state if the power NOTE: When the SSR output is connected as normally open (NO), the supply is interrupted or if the probe is damaged.





Closed

Open

Closed

Probe triggered

Probe seated

standard probe will remain in the non-triggered (seated) state if the power NOTE: When the SSR output is connected as normally open (NO), the supply is interrupted or if the probe is damaged.

## Connecting the HSI to a standard probe and the CNC controller

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## Warranty

Equipment requiring attention under warranty must be returned to your equipment supplier.

Unless otherwise specifically agreed in writing between you and Renishaw, if you purchased the equipment from a Renishaw company, the warranty provisions contained in Renishaw's CONDITIONS OF SALE apply. You should consult these conditions in order to find out the details of your warranty but, in summary, the main exclusions from the warranty are if the equipment has been:

- · neglected, mishandled or inappropriately used; or
- modified or altered in any way except with the prior written agreement of Renishaw.

If you purchased the equipment from any other supplier, you should contact them to find out what repairs are covered by their warranty.

## China RoHS

For more information, on China RoHS visit: www.renishaw.com/mtpchinarohs.

## EU declaration of conformity

# CE

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

The full text of the EU declaration of conformity is available at: 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

## 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.

#### 47 CFR Section 15.105

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

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## 安全须知

#### 用户须知

在所有涉及使用机床的应用中,建议采取保护眼睛的措施。

#### 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,并应确保提供充分的防护装置和安全 联动装置。

在某些情况下,测头信号可能错误指示测头已复位状态。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I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单点回路)。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书中所述进行连接;
- 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。

## Patents

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

EP 1425550

EP 1804020

JP 4237051

US 6941671

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