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# LOGICisp G



#### LOGICisp G - Operating Manual

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# GENERAL INFORMATION

Documentation for the LOGICisp G Collision Sensor consists of this Operating Manual and several other documents (Other applicable documents, page 5). Assembly personnel must read all documentation before starting assembly. Keep all documentation for as long as the product is in your possession. Ensure that all documentation is provided to subsequent owners. Go to <u>www.logicdata.net</u> for more information and support. This Manual may change without notice. The most recent version is available on our website.

### 1.1 OTHER APPLICABLE DOCUMENTS

This Operating Manual contains assembly instructions for the LOGICisp G Collision Sensor. Other applicable documents include:

- Datasheet for the LOGICisp G Collision Sensor.
- Datasheet and Operating Manual for the Control Box in the Table System (if applicable).

### 1.2 COPYRIGHT

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### 1.3 ROYALTY-FREE USE OF IMAGES AND TEXT

After purchase and full payment of the product, all text and images in <u>Chapter 2 "Safety"</u>, may be used free of charge by the customer for 10 years after delivery. They should be used to prepare end user documentation for Height-Adjustable Table Systems. The license does not include logos, designs, and page layout elements belonging to LOGICDATA. The Reseller may make any necessary changes to the text and images to adapt them for the purpose of end user documentation. Texts and images may not be sold in their current state, and may not be published or sublicensed digitally. The transfer of this license to third parties without permission from LOGICDATA is excluded. Full ownership and copyright of the text and graphics remain with LOGICDATA. Texts and graphics are offered in their current state without warranty or promise of any kind. Contact LOGICDATA to obtain text or images in an editable format (documentation@logicdata.net).

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# 2 SAFETY

# 2.1 TARGET AUDIENCE

This Operating Manual is intended for Skilled Persons only. Refer to <u>Chapter 2.8 Skilled Persons on page 9</u> to ensure that personnel meet all requirements.

# 2.2 GENERAL SAFETY REGULATIONS

In general, the following safety regulations and obligations apply when handling the product:

- Do not operate the product unless it is in a clean and perfect condition
- Do not remove, change, bridge, or bypass any protection, safety, or monitoring equipment
- Do not convert or modify any components without written approval from LOGICDATA
- In the event of malfunction or damage, faulty components must be replaced immediately
- Unauthorized repairs are prohibited
- Do not attempt to replace hardware unless the product is in a de-energized state
- Only Skilled Persons are allowed to work with LOGICisp G Collision Sensors
- Ensure that national worker protection conditions and national safety and accident prevention regulations are observed during operation of the system

### 2.3 INTENDED USE

LOGICisp G is a Gyro Collision Sensor for electrically Height-Adjustable Tables. It is installed by Resellers into Height-Adjustable Table Systems. It is used to recognize collisions between the Table System and other objects. It is intended for indoor use only. It may only be installed in compatible Height-Adjustable Table Systems and with LOGICDATA-approved accessories. Contact LOGICDATA for further details. Usage beyond or outside the intended use will void the product's warranty.

# 2.4 REASONABLY FORESEEABLE MISUSE

Usage outside of the intended use may lead to minor injury, serious injury, or even death. Reasonably foreseeable misuse of the Collision Sensor includes, but does not extend to:

• Connecting unauthorized parts to the product. If you are unsure as to whether a part can be used with a Collision Sensor, contact LOGICDATA for further information

**DANGER** 

The dedicated sockets on the Control Box or LOGICisp G may only be used to accommodate LOGICDATAapproved sensor units. Connecting other telecommunication equipment to these terminals may cause damage to the Control Box, LOGICisp G or other products in the system.



# 2.5 EXPLANATION OF SYMBOLS AND SIGNAL WORDS

Safety Notices contain both symbols and signal words. The signal word indicates the severity of the hazard.		
<b>DANGER</b>	Indicates a hazardous situation which, if not avoided, will result in death or serious injury.	
<b>WARNING</b>	Indicates a hazardous situation which, if not avoided, could result in death or serious injury.	
<b>A</b> CAUTION	Indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.	
A NOTICE	Indicates a situation which, if not avoided, could result in damage to the product through electrostatic discharge (ESD).	
NOTICE	Indicates a situation that will not lead to personal injury, but could lead to damage to the device or the environment.	
INFO 🕪	Indicates the protection class of the device: Protection Class III. Protection Class III devices may only be connected to SELV or PELV power sources.	
INFO	Indicates important tips for handling the product.	

# 2.6 LIABILITY

LOGICDATA products comply with all currently applicable health and safety regulations. However, risk can result from incorrect operation or misuse. LOGICDATA is not liable for damage or injury caused by:

- Improper product use
- Disregard of the documentation
- Unauthorized product alterations
- Improper work on and with the product
- Operation of damaged products
- Wear parts
- Improperly performed repairs
- Unauthorized changes to the operating parameters
- Disasters, external influence, and force majeure

The information in this Operating Manual describes the characteristics of products without assurances. Resellers assume responsibility for the LOGICDATA products installed in their applications. They must



ensure their product complies with all relevant directives, standards, and laws. LOGICDATA shall not be held liable for any damage that is directly or indirectly caused by the delivery or use of this document. Resellers must observe the relevant safety standards and guidelines for each product in the Table System.

### 2.7 RESIDUAL RISKS

Residual risks are the risks that remain after all relevant safety standards have been complied with. Residual risks associated with the installation of LOGICisp G are listed here and throughout this Operating Manual. See also <u>Chapter 1.1 Other Applicable Documents on page 5</u>. The symbols and signal words used in this Operating Manual are listed in <u>Chapter 2.5 Explanation of Symbols and Signal Words on page 7</u>.



#### Risk of death or serious injury through electric shocks

LOGICisp G Collision Sensor is a protection CLASS III device. Although you will not have to connect the Collision Sensor to the Control Box during assembly, basic safety precautions must be taken at all times. Failure to observe electrical safety precautions

may lead to death or serious injury through electric shocks.

- Do not convert or modify the Collision Sensor in any way
- Do not immerse the Collision Sensor or its components in liquid. Clean only with a dry or slightly damp cloth
- Do not place the Cable of the Collision Sensor on heated surfaces
- Check the housing and cables of the Collision Sensor for visible damage. Do not install or operate damaged products.

 WARNING Risk of death or serious injury in explosive atmospheres Operating the Collision Sensor in potentially explosive atmospheres may lead to death or serious injury through explosions.
 Do not operate the Collision Sensor in potentially explosive atmospheres

**CAUTION** 

Risk of minor or moderate injury through tripping

During the assembly process, you may have to step over Cables. Tripping over Cables may lead to minor or moderate injury.

- Ensure that the assembly area is kept clear of unnecessary obstructions
- Be careful not to trip over Cables

**A** CAUTION

**Risk of minor or moderate injury through crushing** The LOGICisp G is not intended as a user safety device. Failure to observe basic safety precautions may lead to minor ot moderate injury through crushing.

- Keep all body parts away from the table's range of motion while it is moving
- Ensure the table's range of motion is free from obstructions (open windows, etc.)



## 2.8 SKILLED PERSONS

LOGICisp G Collision Sensors may only be installed by Skilled Persons. A Skilled Person is defined as someone who:

• Has read and understood all documentation relevant to the Collision Sensor

# 2.9 NOTES FOR RESELLERS

Resellers are companies that purchase LOGICDATA products for installation in their own products.

INFO	For reasons of EU conformity and product safety, Resellers should provide end users with an Operating Manual in their native EU official language.
INFO	The Charter of the French Language (La charte de la langue française) or Bill 101 (Loi 101) guarantees the right of the population of Quebec to conduct business and commercial activities in French. The bill applies to all products sold and used in Quebec. For table systems that will be sold or used in Quebec, Resellers must provide all product relevant texts in French. These include, but are not limited to:
	Operating Manuals
	All other product documentation, including datasheets
	• Inscriptions on the product (such as labels), including those on product packaging
	• Warranty certificates The French inscription may be accompanied with a translation or translations, but no inscription in another language may be given greater prominence than that in French.
INFO	Operating Manuals must include all the safety instructions that end users require to handle the product safely. They must also include an instruction to always keep the Operating Manual in the immediate vicinity of the product.
INFO	No unauthorized persons (young children, persons under the influence of medications, etc.) should be allowed to handle the product.



# 3 SCOPE OF DELIVERY

The standard scope of delivery for the LOGCIisp G consists of the Collision Sensor and its pre-attached cable. All other components necessary for installing the Collision Sensor must be supplied separately by the reseller.

# 4 UNPACKAGING

To unpackage the product:

- 1. Remove all components from the packaging
- 2. Check the contents of the package for completeness and damage
- 3. Provide the Operating Manual to the operating personnel
- 4. Dispose of the packaging material

**NOTICE** Dispose of the packaging material in an environmentally friendly manner. Remember to separate plastic parts from the cardboard packaging.



Ensure proper ESD handling during unpackaging. Damage that can be attributed to electrostatic discharge will void warranty claims.



# 5 PRODUCT

Fig.1 shows a standard model of the LOGICisp G Collision Sensor. The exact variant of the LOGICisp G is denoted by the product's order code. Consult the accompanying data sheet to ensure that you have received the correct variant.

# 5.1 ABOUT INTELLIGENT SYSTEM PROTECTION

Intelligent System Protection (ISP) is LOGICDATA's collision detection system. It aims to reduce the risk of system damage when using LOGICDATA products. When a collision is detected, all Actuators stop immediately and move back slightly in the opposite direction (Drive Back Function). The following points must be observed regarding the ISP function.

- ISP sensitivity and ISP shutdown values depend on the complete system (mechanical and electronic components). Contact LOGICDATA to determine the ISP suitability of your Table System.
- After ISP has shutdown, the next movement of the system can only be in the opposite direction.
- ISP shutdown values can be adjusted in the system parameters. Contact LOGICDATA for further details.

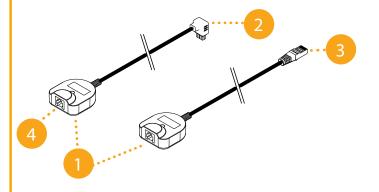
### 5.2 KEY PRODUCT FEATURES

There are two variants of LOGICisp G - Master and Slave. Master Sensor is connected to the Control Box, and Slave can optionally be added to the system by connecting it to the Master sensor to cover bigger height adjustable table surfaces if required.



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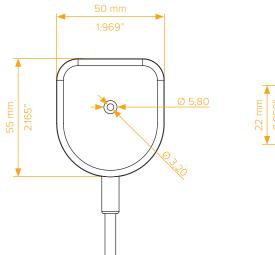
1	Collision Sensor
2	LOGICisp G Master Cable Connector (for connecting to Control Box)
3	LOGICisp G Slave Cable Connector (for connecting to Master Collision Sensor RJ10 socket)
4	RJ10 Connector (functional only on LOGICisp G Master product)



#### Fig. 1: Product features, LOGICisp G Master and Slave

# 5.3 DIMENSIONS LOGICISP G

Length	55 mm
Width	50 mm
Height	22 mm



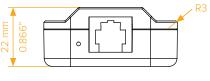


Fig. 2: Product dimensions, LOGICisp G



# 6 ASSEMBLY

This chapter describes the process of installing the LOGCIisp G Collision Sensor into the Height-Adjustable Table System.

# 6.1 SAFETY DURING ASSEMBLY

CAUTION	<b>Risk of death or serious injury through electric shocks</b> LOGICisp G Collision Sensors are electrical devices. Basic safety precautions must be taken at all times. Failure to observe electrical safety precautions may lead to death o serious injury through electric shocks.
	• Ensure that the Collision Sensor is not connected to the Control Box during assembly
	• Do not convert or modify the Collision Sensor in any way
	• Check the Collision Sensor and its Cables for visible damage. Do not install or operate
	damaged products
CAUTION	<b>Risk of minor or moderate injury through improper handling</b> Improper handling of the product during assembly may lead to minor or moderate injury through cutting, pinching, and crushing.
	Avoid contact with sharp edges
	• Be careful while handling tools that may cause personal injury
	• Ensure assembly complies with the generally accepted standards and guidelines of
	electrical engineering and furniture manufacturing
	Read all instructions and safety advice carefully
CAUTION	<b>Risk of minor or moderate injury through tripping</b> During assembly and operation, poorly routed Cables may become a trip hazard Tripping over Cables may lead to minor or moderate injury.
	• Ensure that Cables are routed properly to avoid trip hazards
	• Be careful not to trip over Cables when installing the Collision Sensor
NOTICE	Ensure proper ESD handling during assembly. Damage that can be attributed t electrostatic discharge will void warranty claims.
NOTICE	To avoid damage to the product, measure the dimensions of the Collision Sensor befor assembly.
NOTICE	Before assembly, all parts must be acclimatised to the ambient conditions.
NOTICE	Do not lift the Collision Sensor by its cable. This will cause irreparable damage to the produc



# 6.2 REQUIRED COMPONENTS

1	LOGCIisp G
2	1 Mounting Screw (2,9 x 16mm)
Tool	Torque Screwdriver
Tool	Drill or Drilling Machine

# 6.3 NOTES FOR ASSEMBLY

The LOGICisp G is assembled directly on to the bottom of the table top. It shall be placed near the middle of the table. The cable shall be fixed with cable holder so that it isn't hanging in the air, this could cause miss triggering of the LOGICisp G!

NOTICE	<ul> <li>If the collision sensor is mounted incorrectly, Intelligent System Protection may not work properly. This could lead to damage to the Table System.</li> <li>Use screw to attach the sensor</li> <li>Ensure the screw has been tightened properly</li> <li>Ensure the screw cannot be released</li> </ul>
NOTICE	Connecting the External Collision Sensor to other devices or Plug Ports, including external telecommunication ports, may damage the Sensor irreparably. Contact LOGICDATA if you are unsure whether the External Collision Sensor is compatible with your device.
INFO	LOGICDATA recommends a tightening torque of 2 - 2.5 Nm for the connection to the table top, depending on material used.
INFO	Exact dimensions for your collision sensor can be found in the product's datasheet.



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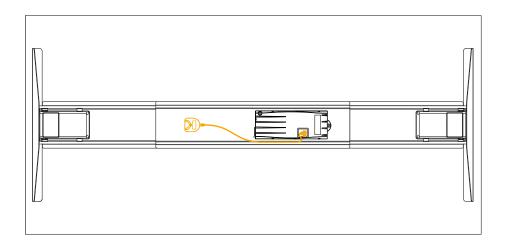


Fig. 3: Mounting the LOGICisp G to a 2-leg table system

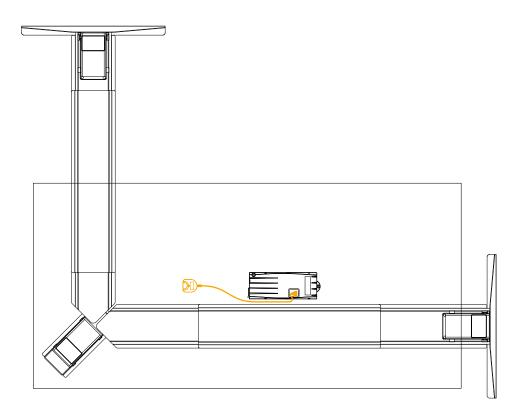


Fig. 4: Mounting the LOGICisp G to a 3-leg table system



# 6.4 PROCESS

- Place the surface of the Sensor against the Table Top. Use Fig. 3 and 4 to help you place the Sensor(s)correctly.
- 2. Hold the Sensor in the desired position and mark the points for drilling.
- 3. Pre-drill the holes into the Table Top.
- 4. Use the Mounting Screw to attach the sensor to the Table Top.

### 6.5 CONNECTING TO THE SYSTEM

#### 6.5.1 CONNECTING TO A CONTROL BOX

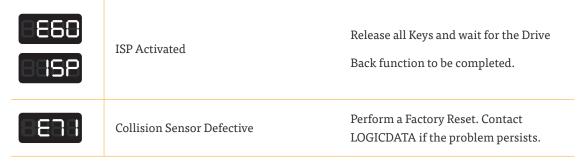
NOTIO	<b>CE</b> The LOGICisp G shall be placed in the middle of the table as shown in Fig. 3 and 4.	
DANG	<b>GER</b> The female 8-PIN microfit connector sockets on the Control Box may only be used to accommodate LOGICDATA approved sensor units. Inserting any other electronic devices into the socket may cause damage to the Control Box or other products in the system.	
INFO	If your system is not parametrized to support Intelligent System Protection, you will need to alter the parameters so that the LOGICisp G Collision Sensor functions correctly. Contact LOGICDATA for further advice on system parameters.	
1.	Ensure the Control Box is not connected to the power source.	
2.	Insert the Male 8-pin micro-fit connector of LOGICisp G Master into the Sensor Port on the	
	Control Box.	
3.	Optional: Connect LOGICisp G Slave RJ10 male connector into LOGICisp G Master RJ10 female connector for bigger table surface coverage.	
4.	Reconnect the Control Box to the power source.	

Fig. 5: Attaching LOGICisp G Master/Slave Collision Sensors to a Control Box



# **SYSTEM INFORMATION**

# 7.1 CONTROL BOX MESSAGES SHOWN ON A COMPATIBLE HANDSET WITH DISPLAY



# 8 ADDITIONAL INFORMATION

# 8.1 SOFTWARE-DEPENDENT FUNCTIONS

A full list of Software-Dependent Functions can be found in the Manual of the installed Control Box.

# 8.2 DISASSEMBLY

To disassemble the LOGICisp *G*, disconnect the Control Box from the power source. Then, follow the assembly instructions in reverse order.

# 8.3 MAINTENANCE

LOGICisp G Collission Sensor is maintenance-free for their entire service lifetime.

WARNING Risk of death or serious injury through electric shocks and other hazards Using a Collision Sensor alongside unauthorized spare or accessory parts may lead to death or serious injury through electric shocks and other hazards.

- Only use accessory parts produced or approved by LOGICDATA
- Only use replacement parts produced or approved by LOGICDATA
- Only allow Skilled Persons to perform repairs or install accessory parts
- Contact customer services immediately if the system malfunctions
- The use of unauthorized spare or accessory parts may cause system damage. Warranty claims are void in this scenario.



#### 8.3.1 CLEANING

- 1. Wait 30 seconds for residual voltage to dissipate.
- 2. Wipe the Collision Sensor with a dry soft cloth. Never immerse the Collision Sensor in liquid.
- 3. Wait for the Collision Sensor to dry completely.

#### 8.3.2 REPLACING A COLLISION SENSOR

- 1. Disconnect the Control Box from Mains
- 2. Disconnect the Collision Sensor from the Control Box.
- 3. Remove the Collision Sensor from the Table Top.
- 4. Mount the new Collision Sensor onto the Table Top.
- 5. Plug the Collision Sensor back into the Control Box.
- 6. Reconnect the Control Box to the Mains.

### 8.4 TROUBLESHOOTING

A list of common problems and their solutions can be found in the Operating Manual of the installed Control Box.

### 8.5 DISPOSAL



• Dispose of all components separately from household waste. Use designated collection points or disposal companies authorized for this purpose



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