



# CONEX-CC

## Single-Axis DC Motion with Controller/Driver

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Introduction,  
Safety & Service

# Warranty

Newport Corporation warrants that this product will be free from defects in material and workmanship and will comply with Newport's published specifications at the time of sale for a period of one year from date of shipment. If found to be defective during the warranty period, the product will either be repaired or replaced at Newport's option.

To exercise this warranty, write or call your local Newport office or representative, or contact Newport headquarters in Irvine, California. You will be given prompt assistance and return instructions. Send the product, freight prepaid, to the indicated service facility. Repairs will be made and the instrument returned freight prepaid. Repaired products are warranted for the remainder of the original warranty period or 90 days, whichever occurs last.

## **Limitation of Warranty**

The above warranties do not apply to products which have been repaired or modified without Newport's written approval, or products subjected to unusual physical, thermal or electrical stress, improper installation, misuse, abuse, accident or negligence in use, storage, transportation or handling.

THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE. NEWPORT CORPORATION SHALL NOT BE LIABLE FOR ANY INDIRECT, SPECIAL, OR CONSEQUENTIAL DAMAGES RESULTING FROM THE PURCHASE OR USE OF ITS PRODUCTS.

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Original instructions.

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# Preface

## Documentation Organization

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CONEX-CC documentation set includes 2 parts:

- **Introduction, Safety and Service** (this document).
- **Controller Manual** describing available commands.

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### NOTE

**During operation, always refer to this document for safety information.**

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## Confidentiality & Proprietary Rights

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### Reservation of Title

The Newport Programs and all materials furnished or produced in connection with them ("Related Materials") contain trade secrets of Newport and are for use only in the manner expressly permitted. Newport claims and reserves all rights and benefits afforded under law in the Programs provided by Newport Corporation.

Newport shall retain full ownership of Intellectual Property Rights in and to all development, process, align or assembly technologies developed and other derivative work that may be developed by Newport. Customer shall not challenge, or cause any third party to challenge, the rights of Newport.

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Customer shall protect the Newport Programs and Related Materials as trade secrets of Newport, and shall devote its best efforts to ensure that all its personnel protect the Newport Programs as trade secrets of Newport Corporation. Customer shall not at any time disclose Newport's trade secrets to any other person, firm, organization, or employee that does not need (consistent with Customer's right of use hereunder) to obtain access to the Newport Programs and Related Materials. These restrictions shall not apply to information (1) generally known to the public or obtainable from public sources; (2) readily apparent from the keyboard operations, visual display, or output reports of the Programs; (3) previously in the possession of Customer or subsequently developed or acquired without reliance on the Newport Programs; or (4) approved by Newport for release without restriction.

# EU Declaration of Conformity



2 Tech Drive  
Andover, MA 01810  
[www.mksinst.com](http://www.mksinst.com)

## EU27 Declaration of Conformity

### Application of Council Directive(s):

- Electromagnetic Compatibility Directive (EMCD) – 2014/30/EU
- Machinery Directive – 2006/42/EC
- Restriction of Hazardous Substances Directive (RoHS2) – 2011/65/EU <sup>(7)</sup>
- Restriction of Hazardous Substances Directive (RoHS3) – (EU) 2015/863<sup>(7)</sup>
- Waste Electrical and Electronic Equipment – Directive 2012/19/EU



### Standard(s) to which conformity is declared:

- EN 61326-1:2013 – (EMC)
- EN ISO 12100:2010 Safety of Machinery – General Principles of Design – Risk Assessment and Risk Reduction

### Emissions:

- EN 55011: 2016 +A1:2017 <sup>(4)</sup> Industrial, scientific and medical equipment - Radio-frequency disturbance characteristics - Limits and methods of measurement

### Immunity:

- EN 61000-4-2:2009 EMC/Electrostatic Discharge Immunity Test
- EN 61000-4-3:2006+A2:2010 EMC/Radiated Radio Frequency Electromagnetic Field Immunity Test
- EN 61000-4-4:2012 EMC/Electrical Fast Transient/Burst Immunity Test
- EN 61000-4-5:2014+A1:2017 EMC/Surge Immunity Test
- EN 61000-4-6:2014 EMC/Conducted Disturbances induced by Radio Frequency Fields Immunity Test
- IEC 61000-4-11:2004 + AMD 1:2017 EMC/Voltage Dips, Short Interruptions and Variations Immunity Test <sup>(5)</sup>

Manufacturers Name: MKS Instruments, Inc., 2 Tech Drive, Andover, MA 01810 USA

Authorized Representatives Name & Location: \_\_\_\_\_ / \_\_\_\_\_

Equipment Type/Description: Single-axis DC Motion with Controller/Driver

Model Number(s) <sup>(6)</sup>: CONEX-BGS50CC/ -LTA-HL/ -LTA-HS/ -MFACC/ -PR50CC/ -SR50CC/ -TRA6CC/ -TRA12CC/ -TRA25CC/ -TRB6CC/ -TRB12CC/ -TRB25CC-URS50BCC

The object of the declaration described above is in conformity with the relevant Community harmonization legislation. MKS product conforms to the above Directive(s) and Standard(s) only when installed in accordance with manufacturer's specifications. This declaration has been issued under the sole responsibility of the manufacturer.

Date: 10/25/2021

Le Cointe Hervé – Quality Director

4) Class A, Group 2

5) Applicable to AC powered product only.

6) Compliance of the above model numbers requires the use of a braided shielded cable properly terminated at both ends – if so noted in the MKS Instruction Manual.

7) RoHS Directive has to be checked for in scope products; cannot CE mark without compliance to RoHS. RoHS Directive can be unchecked only for systems which MKS sells which qualify for "Large Scale Industrial Tool" exclusion.

# UK Declaration of Conformity



2 Tech Drive  
 Andover, MA 01810  
[www.mksinst.com](http://www.mksinst.com)

## UK Declaration of Conformity

**Application of Council Directive(s):**

- Electromagnetic Compatibility Directive (EMCD) – 2014/30/EU
- Machinery Directive – 2006/42/EC
- Restriction of Hazardous Substances Directive (RoHS2) – 2011/65/EU <sup>(7)</sup>
- Restriction of Hazardous Substances Directive (RoHS3) – (EU) 2015/863<sup>(7)</sup>
- Waste Electrical and Electronic Equipment – Directive 2012/19/EU



**Standard(s) to which conformity is declared:**

- BS EN 61326-1:2013 – (EMC)
- BS EN ISO 12100:2010 Safety of Machinery – General Principles of Design – Risk Assessment and Risk Reduction

**Emissions:**

- EN 55011: 2016 +A1:2017 <sup>(4)</sup> Industrial, scientific and medical equipment - Radio-frequency disturbance characteristics - Limits and methods of measurement

**Immunity:**

- BS EN 61000-4-2:2009 EMC/Electrostatic Discharge Immunity Test
- BS EN 61000-4-3:2006+A2:2010 EMC/Radiated Radio Frequency Electromagnetic Field Immunity Test
- BS EN 61000-4-4:2012 EMC/Electrical Fast Transient/Burst Immunity Test
- BS EN 61000-4-5:2014+A1:2017 EMC/Surge Immunity Test
- BS EN 61000-4-6:2014 EMC/Conducted Disturbances induced by Radio Frequency Fields Immunity Test
- IEC 61000-4-11:2004 + AMD 1:2017 EMC/Voltage Dips, Short Interruptions and Variations Immunity Test <sup>(5)</sup>

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The object of the declaration described above is in conformity with the relevant Community harmonization legislation. MKS product conforms to the above Directive(s) and Standard(s) only when installed in accordance with manufacturer’s specifications. This declaration has been issued under the sole responsibility of the manufacturer.

Date: 10/25/2021

**Le Cointe Hervé – Quality Director**

4) Class A, Group 2  
 5) Applicable to AC powered product only.  
 6) Compliance of the above model numbers requires the use of a braided shielded cable properly terminated at both ends – if so noted in the MKS Instruction Manual.  
 7) RoHS Directive has to be checked for in scope products; cannot CE mark without compliance to RoHS. RoHS Directive can be unchecked only for systems which MKS sells which qualify for “Large Scale Industrial Tool” exclusion.



# Single-Axis DC Motor Controller/Driver CONEX-CC

## 1.0 Introduction

### 1.1 Definitions and Symbols

The following terms and symbols are used in this documentation and also appear on the CONEX-CC Controller/Driver where safety-related issues occur.

#### 1.1.1 General Warning or Caution



*Figure 1: General Warning or Caution Symbol.*

The Exclamation Symbol in Figure 1 may appear in Warning and Caution tables in this document. This symbol designates an area where personal injury or damage to the equipment is possible.

#### 1.1.2 Electric Shock



*Figure 2: Electrical Shock Symbol.*

The Electrical Shock Symbol in Figure 2 may appear on labels affixed to the CONEX-CC Controller/Driver. This symbol indicates a hazard arising from dangerous voltage. Any mishandling could result in irreparable damage to the equipment, in personal injury, or death.

#### 1.1.3 European Union CE Mark



*Figure 3: CE Mark.*

The presence of the CE Mark on Newport Corporation equipment means that it has been designed, tested and certified as complying with all applicable European Union (CE) regulations and recommendations.

## 1.2 Warnings and Cautions

The following are definitions of the Warnings, Cautions and Notes that may be used in this manual to call attention to important information regarding personal safety, safety and preservation of the equipment, or important tips.




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### WARNING

**Situation has the potential to cause bodily harm or death.**

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### CAUTION

**Situation has the potential to cause damage to property or equipment.**

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### NOTE

**Additional information the user or operator should consider.**

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## 1.3 General Warnings and Cautions

The following general safety precautions must be observed during all phases of operation of this equipment.

Failure to comply with these precautions or with specific warnings elsewhere in this manual violates safety standards of design, manufacture, and intended use of the equipment.

- Heed all warnings on the unit and in the operating instructions.
- To prevent damage to the equipment, read the instructions in this manual.
- Route power cords and cables where they are not likely to be damaged.
- Keep air vents free of dirt and dust.
- Keep liquids away from unit.
- Do not expose equipment to excessive moisture (>85% humidity)
- Do not operate this equipment in an explosive atmosphere.
- Disconnect power before cleaning the CONEX-CC unit. Do not use liquid or aerosol cleaners.
- Do not open the CONEX-CC controller. There are no user-serviceable parts inside.
- Return equipment to Newport Corporation for service and repair.
- Follow precautions for static-sensitive devices when handling electronic circuits.



## 2.0 Maintenance and Service

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### 2.1 Enclosure Cleaning

The CONEX-CC Controller/Driver should only be cleaned with a lightly dampened cloth or sponge with a soapy water solution. Do not use an acetone or alcohol solution; this will damage the finish of the enclosure.

### 2.2 Obtaining Service

The user should not attempt any maintenance or service of the CONEX-CC Controller/Driver and its accessories beyond the procedures outlined in this manual.

Any problem that cannot be resolved should be referred to Newport Corporation. When calling Newport regarding a problem, please provide the Tech Support representative with the following information:

- Your contact information.
- System serial number or original order number.
- Description of problem.
- Environment in which the system is used.
- State of the system before the problem.
- Frequency and repeatability of problem.
- Can the product continue to operate with this problem?
- Can you identify anything that may have caused the problem?

Complete a copy of the Service Form as represented on the next page and include it with your shipment.

Any CONEX-CC controller/driver being returned to Newport must have been assigned an RMA number by Newport. Assignment of the RMA requires the item serial number.

CONEX-CC Controller/Driver being returned under an RMA must be securely packaged for shipment. If possible, reuse the original factory packaging.







Visit MKS | Newport Online at:  
[www.newport.com](http://www.newport.com)

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