



Installation Instructions

1747 Open Controller FlashDrive **(Catalog Number 1747-OCSDxx)**

Before You Begin

The FlashDrive™ provides non-volatile storage for the open controller. You can install one FlashDrive per open controller CPU. You can also connect the FlashDrive to any standard IDE ribbon-cable connection in a personal computer.

Important: Install the FlashDrive inside the open controller CPU **before** you install the open controller CPU in the chassis.

Before you install the FlashDrive, determine how you will load your application software on the drive. If the FlashDrive came with an operating system loaded, you can install the FlashDrive in the open controller CPU and boot from the FlashDrive. If the FlashDrive does not have an operating system loaded, you can use one of these methods to boot the open controller and load an operating system:

- attach the FlashDrive as an IDE drive inside another PC
- boot from a PC card in a PCMCIA interface within the open controller system
- boot from a remote PC connected to the open controller COM1 port.


These installation instructions show how to install the FlashDrive either with the open controller CPU or as another drive inside a computer. For information about booting an open controller system, see the Open Controller CPU User Manual, publication 1747-6.16.

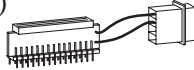
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What this package contains

- one 1747-OCSDxx FlashDrive
- grounding wriststrap

What you need

- small flat-head screwdriver
- 1747-OCExxxA open controller CPU
- FlashDrive screws (M1.0 x 0.6 x 4 mm, slotted, cheese-head) that came with the open controller CPU
- ribbon cable that came with the open controller CPU 
- the 2.5" to 3.5" adapter cable and jumper in the 1747-OCSDCK cable kit (optional, for mounting the FlashDrive as a drive within a desktop personal computer)



Handling the FlashDrive



ATTENTION: Electrostatic discharge (ESD) might be present whenever you handle the FlashDrive. ESD can cause internal circuit damage that might not be apparent during installation or initial use. Wear a grounding wriststrap while handling the FlashDrive.

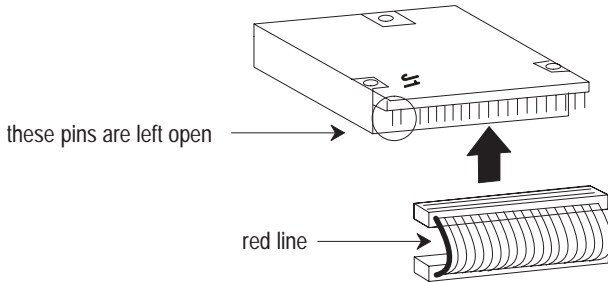
Take these precautions to guard against ESD damage:

- Before handling the FlashDrive, wear a grounding wriststrap and touch a grounding object to discharge any built-up static charge.
- Avoid touching the connector pins on the FlashDrive.
- If the FlashDrive is not in use, store it in the anti-static packaging in which it was shipped.

Installing the FlashDrive in the Open Controller CPU

Before you begin, make sure the open controller CPU is not installed in the open controller chassis.

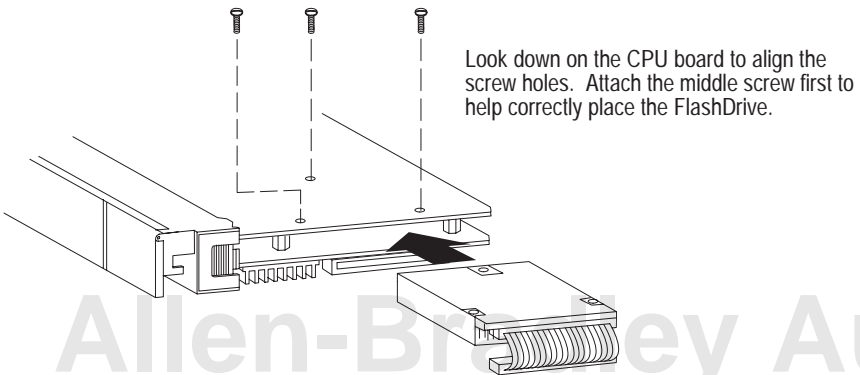
1. Attach the ribbon cable to the FlashDrive. Line the red line of the ribbon cable with the J1 marking on the FlashDrive circuit board



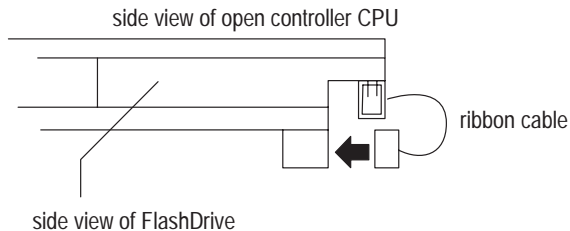
2. Insert the FlashDrive in the open controller CPU and attach it securely. The screws come with the open controller CPU. There are stops inside the open controller CPU that help you correctly place the FlashDrive.



ATTENTION: Not installing the screws derates the open controller system and may short electrical components within the CPU.



3. Attach the ribbon cable to the open controller CPU.



Installing the FlashDrive as an IDE Disk in a Computer

You can install the FlashDrive as an IDE disk in another computer. From there, you can format the drive and copy files to it before removing it and re-installing it in an open controller CPU.

1. On the personal computer, change the BIOS setup to recognize two hard drives (the FlashDrive will be the second drive). Either set the BIOS to autoconfigure the second drive, or enter:

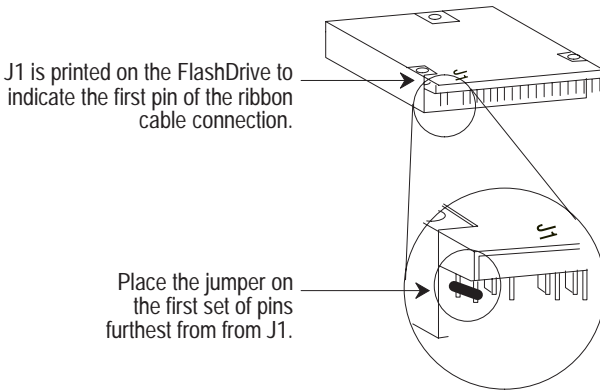
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Capacity	Cylinders	Heads	Sectors/Track
62 Meg	640	6	32
42 Meg	820	6	17
21 Meg	615	4	17

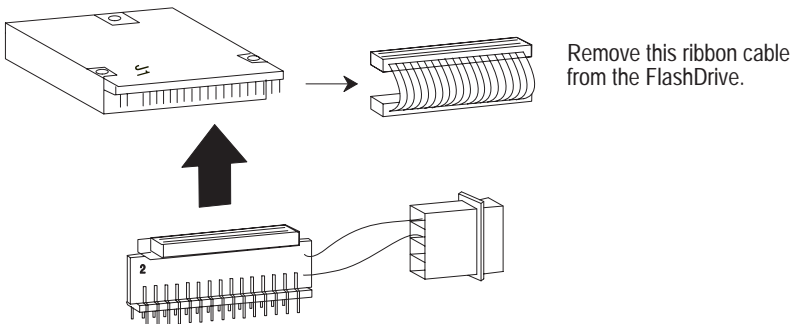
If you have a setting for IDE controller speed, set it for slow or medium. The FlashDrive does not work at fast speed.

2. Turn off power to the personal computer and locate the ribbon cable to your existing hard drive. It should have a second connector, which is where you will connect the FlashDrive.

3. Place a jumper on the first pins of the FlashDrive to make it a slave drive (such as D:). The jumper is in the cable kit (1747-OCSDCK).

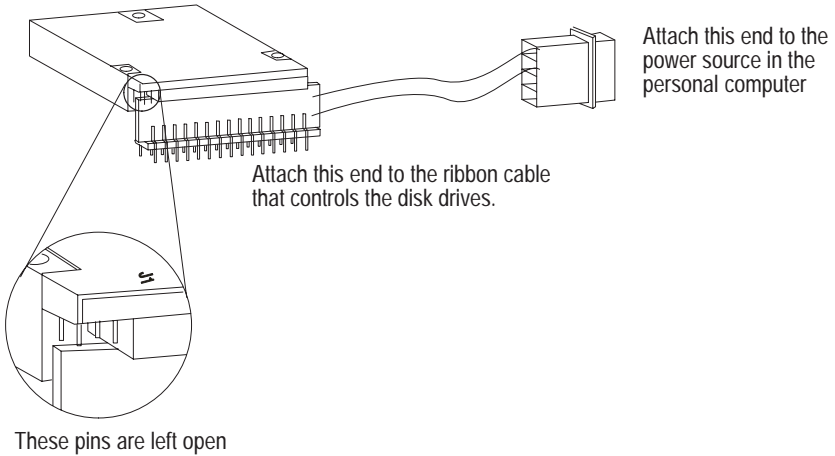


4. Depending on the hard drive in your personal computer, you might have to add a jumper to make it the master drive (C:). Check the documentation for your hard drive.
5. If there is a ribbon cable attached to the FlashDrive, remove it before attaching the 2.5" to 3.5" adapter cable to the FlashDrive.



Important: The connector is not keyed. Make sure pin 1 of the FlashDrive (indicated by J1 and a square solder tab on the drive) is lined up with the interconnector (indicated by a number 1 printed on the back of the PC board).

6. Insert the FlashDrive in the computer and attach it securely.



Loading Software

Once the FlashDrive is installed and you are able to boot the open controller CPU (the operating system is already loaded, see page 1), there are different ways to load software on the FlashDrive:

- use DOS INTERLNK (see your DOS documentation) to load from a host computer
- load from a floppy disk drive that is connected to the open controller parallel port
- load from a PC card in a PCMCIA interface within the open controller system
- load from a remote PC connected to the open controller COM1 port

You can also also connect the FlashDrive to any standard IDE ribbon-cable connection in a PC and load software from that PC. Then install the FlashDrive within the open controller.

Additional Documentation

The following documents are available for additional information about using the FlashDrive in an open controller system:

This book:	Has this publication number:
Open Controller CPU User Manual	1747-6.16
Open Controller System Overview	1747-2.22

European Union Directive Compliance

If this product is installed within the European Union or EEA regions and has the CE mark, the following regulations apply.

EMC directive

This apparatus is tested to meet Council Directive 89/336 Electromagnetic Compatibility (EMC) using a technical construction file and the following standards, in whole or in part:

- EN 50081-2 EMC – Generic Emission Standard, Part 2 – Industrial Environment
- EN 50082-2 EMC – Generic Immunity Standard, Part 2 – Industrial Environment

The product described in this manual is intended for use in an industrial environment.



Low voltage directive





This apparatus is also designed to meet Council Directive 73/23 Low Voltage, by applying the safety requirements of EN 61131-2 Programmable Controllers, Part 2 – Equipment Requirements and Tests.

For specific information that the above norm requires, see the appropriate sections in this manual, as well as the following Allen-Bradley publications:

- Industrial Automation Wiring and Grounding Guidelines, publication 1770-4.1
- Automation Systems Catalog, publication B111

CSA Hazardous Location Approval

CSA Hazardous Location Approval	Approbation d'utilisation dans des emplacements dangereux par la CSA
<p>CSA certifies products for general use as well as for use in hazardous locations. Actual CSA certification is indicated by the product label as shown below, and not by statements in any user documentation.</p>	<p>La CSA certifie les produits d'utilisation générale aussi bien que ceux qui s'utilisent dans des emplacements dangereux. La certification CSA en vigueur est indiquée par l'étiquette du produit et non par des affirmations dans la documentation à l'usage des utilisateurs.</p>
<p>Example of the CSA certification product label</p> 	<p>Exemple d'étiquette de certification d'un produit par la CSA</p> 
<p>To comply with CSA certification for use in hazardous locations, the following information becomes a part of the product literature for CSA-certified Allen-Bradley industrial control products.</p> <ul style="list-style-type: none"> • This equipment is suitable for use in Class I, Division 2, Groups A, B, C, D, or non-hazardous locations only. • The products having the appropriate CSA markings (that is, Class I Division 2, Groups A, B, C, D), are certified for use in other equipment where the suitability of combination (that is, application or use) is determined by the CSA or the local inspection office having jurisdiction. 	<p>Pour satisfaire à la certification de la CSA dans des endroits dangereux, les informations suivantes font partie intégrante de la documentation des produits industriels de contrôle Allen-Bradley certifiés par la CSA.</p> <ul style="list-style-type: none"> • Cet équipement convient à l'utilisation dans des emplacements de Classe 1, Division 2, Groupes A, B, C, D, ou ne convient qu'à l'utilisation dans des endroits non dangereux. • Les produits portant le marquage approprié de la CSA (c'est à dire, Classe 1, Division 2, Groupes A, B, C, D) sont certifiés à l'utilisation pour d'autres équipements où la convenance de combinaison (application ou utilisation) est déterminée par la CSA ou le bureau local d'inspection qualifié.
<p>Important: Due to the modular nature of a PLC control system, the product with the highest temperature rating determines the overall temperature code rating of a PLC control system in a Class I, Division 2 location. The temperature code rating is marked on the product label as shown.</p>	<p>Important: Par suite de la nature modulaire du système de contrôle PLC), le produit ayant le taux le plus élevé de température détermine le taux d'ensemble du code de température du système de contrôle d'un PLC dans un emplacement de Classe 1, Division 2. Le taux du code de température est indiqué sur l'étiquette du produit.</p>

<p>CSA Hazardous Location Approval</p>	<p>Approbation d'utilisation dans des emplacements dangereux par la CSA</p>
<p>Temperature code rating</p> <div style="display: flex; align-items: center;">  <div style="text-align: center;"> <p>CL 1 DIV 2 GP A,B,C,D TEMP</p> <div style="background-color: black; width: 60px; height: 20px; margin: 5px auto;"></div> </div> <div style="margin-left: 20px;"> <p>← Look for temperature code rating here</p> </div> </div>	<p>Taux du code de température</p> <div style="display: flex; align-items: center;">  <div style="text-align: center;"> <p>CL 1 DIV 2 GP A,B,C,D TEMP</p> <div style="background-color: black; width: 60px; height: 20px; margin: 5px auto;"></div> </div> <div style="margin-left: 20px;"> <p>← Le taux du code de température est indiqué ici</p> </div> </div>
<p>The following warnings apply to products having CSA certification for use in hazardous locations.</p>	<p>Les avertissements suivants s'appliquent aux produits ayant la certification CSA pour leur utilisation dans des emplacements dangereux.</p>
<div style="display: flex;"> <div style="flex: 1;">  <p>ATTENTION: Explosion hazard —</p> <ul style="list-style-type: none"> • Substitution of components may impair suitability for Class I, Division 2. • Do not replace components unless power has been switched off or the area is known to be non-hazardous. • Do not disconnect equipment unless power has been switched off or the area is known to be non-hazardous. • Do not disconnect connectors unless power has been switched off or the area is known to be non-hazardous. Secure any user-supplied connectors that mate to external circuits on an Allen-Bradley product using screws, sliding latches, threaded connectors, or other means such that any connection can withstand a 15 Newton (3.4 lb.) separating force applied for a minimum of one minute. </div> </div>	<div style="display: flex;"> <div style="flex: 1;">  <p>AVERTISSEMENT: Risque d'explosion —</p> <ul style="list-style-type: none"> • La substitution de composants peut rendre ce matériel inacceptable pour les emplacements de Classe I, Division 2. • Couper le courant ou s'assurer que l'emplacement est désigné non dangereux avant de remplacer les composants. • Avant de débrancher l'équipement, couper le courant ou s'assurer que l'emplacement est désigné non dangereux. • Avant de débrancher les connecteurs, couper le courant ou s'assurer que l'emplacement est reconnu non dangereux. Attacher tous connecteurs fournis par l'utilisateur et reliés aux circuits externes d'un appareil Allen-Bradley à l'aide de vis, loquets coulissants, connecteurs filetés ou autres moyens permettant aux connexions de résister à une force de séparation de 15 newtons (3,4 lb. - 1,5 kg) appliquée pendant au moins une minute. </div> </div>

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 **Rockwell** Automation

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Worldwide representation.



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Allen-Bradley Headquarters, 1201 South Second Street, Milwaukee, WI 53204 USA,
Tel: (1) 414 382-2000 Fax: (1) 414 382-4444