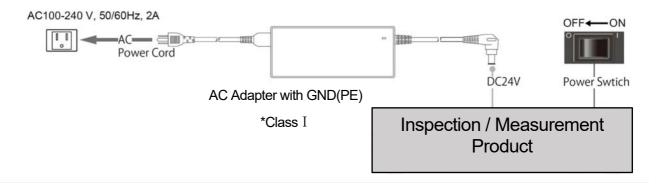
# ACアダプタを電源とする製品のユーザーマニュアル

製品にACアダプタを使用している場合、その製品は、ACアダプタを含めた完成品としてユーザーマニュアルを作成することが必要です。ACアダプタを同梱して出荷する場合とそうでない場合(ユーザー調達)が有りますが、メーカー、及び、販売者は、対象製品とACアダプタと組み合わせて使用する際の安全な使用方法について、マニュアルに十分な情報の記載が要求されます。特にCE marking (EU指令)には、ユーザーマニュアルの要求が有って、コンプライアンスとしての記載義務となっています。

## ■ACアダプタ製品

ACアダプタは、家電・情報機器などの民生製品、検査・計測・診断・医療機器などの産業、医療、介護製品など多くの分野で使用されていますが、ここでは、検査・計測機器(適用規格: IEC 61010-1)について説明します。

## 【例】



# Inspection / Measurement Product DC12V AC Adapter AC 100-240V, 50/60Hz, 1A AC Adapter without GND(PE) \*Class II

### <備考>

- (1) 上記のようにACアダプタには、入力電源として3芯のアース(GND)付のものと2芯のアースがないものがある。これは、メーカーが対象製品の設計段階で選択するものでユーザーマニュアルで指定されたACアダプタの仕様に従って使用することが要求されている。
  - ※詳細は、下記のURLを参照のこと。 https://fujisafety.jp/files/case/JS1-No12.pdf
- (2) CE marking (EU指令)のマニュアル記載要求 https://fujisafety.jp/files/case/JS1-No2.pdf

## ■ACアダプタ製品のマニュアル(例 \*ACアダプタ関連部)

ACアダプタは、直流電源ユニットとして電気安全の対象製品となっていますが、このACアダプタを使用して動作する製品のユーザマニュアルは、AC電源そのものを入力とする製品と同様に安全性に関してユーザーに情報提供することが必要です。CE marking(EU指令)では、装置の使用に関する情報として、この点についても要求があります。以下、ACアダプタを使用した製品のマニュアル (Instruction Manual)の例を記載します。

# For Your Safety

- · Be sure to read this manual before using the Product.
- · Use the Product by following the instructions described in this manual.
- The precautions specific to the Product may be noted on the main unit or in other instruction manuals accompanying it. These precautions must also be observed when you use the product.
- Keep this manual in a safe place where it is readily available for future reference.
- The contents in this manual provide information as of the writing of the manual. The contact information
   (e. g., company address, phone number, website URL, and e-mail address) may have changed without prior



WARNING

Indicates a hazardous situation that, if not avoided, will result in death or serious injury.



CAUTION

Indicates a hazardous situation that, if not avoided, may result in minor injury or property damage.



NOTICE

Indicates a hazardous situation that, if not avoided, may result in property damage including failure of the equipment, system, or facility, but will not result in personal

Be sure to understand warnings and cautions provided in this chapter before use in order to use the Product safely and correctly.



# WARNING

The power supply to the product is DC Input. When operating the product with an AC power supply, be sure to use the specified AC Adapter. Using an AC Adapter other than the specified one may result in electric shock or fire.

- Do not hold the power plug with wet hands.
- Do not connect or disconnect the power plug with wet hands. There is a risk of electric shock.
- Do not use an unspecified AC adapter.

Do not use an unspecified AC adapter which is not supplied with the product. There is a risk of electric shock or fire.



# CAUTION

· Do not use an unspecified power supply cord and voltage.

Use the specified power supply cord with proper input voltage.

Using an unspecified power supply may cause fire or electric leakage and shock.

Do not install the product in a place where an extension cable is required.

Connecting to the cable incompatible with the power supply specification of the product may cause fire due to overheat of the cable.

Use the product within the specified voltage range.

Using a voltage outside the specified range may damage the product. Before turning on the power, be sure to check that the power supply voltage is appropriate.



#### Avoid loose connection.

Insert the power plug completely. If it is inserted loosely, poor contact may cause heat generation, resulting in fire.

Accumulated dust or water droplet on the connection part may cause heat generation, resulting in fire.

• The following actions are prohibited to prevent electric shock or fire due to damage to the power cable.

Pulling the cable, bending the power cable, twisting the power cable, using the power cable in a bundled state, pinching the power cable, putting chemicals on the power cable, placing an object on the power cable, modifying or repairing the power cable, fixing the power cable using a stapler or the like, and using the damaged power cable

(damaged power cable must be replaced with the power cable of the same standard immediately)

 $\cdot$  If the power supply is stopped due to power failure or other reasons used with the AC Adapter,

the power supply to the Product is interrupted instantaneously.

If the power supply to the Product is interrupted instantaneously, wait for recovery from the power failure without doing anything or supply another power.

# **Specifications**;

Power supply	DC24V 50VA	
	AC adapter : AC100-240VA 50/60Hz 2A	*Class I with GND (PE)
Power consumption	50 VA (max.) (DC power supply when connecting supplied peripheral devices)	
Operating temperature range	0 to +50 °C (Humidity: 20 to 80 %RH with no condensation)	
Storage temperature range	-10 to +60 °C (Humidity: 20 to 80 %RH with no condensation)	
Outer dimensions	Approximately 200 × 100 × 50 mm (Unit dimensions: Protruding portions not included.)	
Weight	Approximately 1Kg	

CE marking

EMC Directive : 2014/30/EU EN61326-1:2013 ClassA Group1 Industrial Environment

Low Voltage Directive : 2014/35/EU EN61010-1:2010

RoHS Directive : 2011/65/EU

# ■関連情報 \*下記URL

- 1) ACアダプタの適用規格(IEC/EN 60950-1⇒IEC/EN 62368-1) <a href="https://fujisafety.jp/files/case/JS1-No11.pdf">https://fujisafety.jp/files/case/JS1-No11.pdf</a>
- 2) ACアダプタを電源とする製品のCEマーキング https://fujisafety.jp/files/case/JS1-No12.pdf
- 3) EU指令(CE Marking)と整合規格(Harmonized Standards) https://fujisafety.jp/files/case/JS1-No9.pdf