

## Air Conditioning Control System - Optional Parts

# Replacement Attachment

## Installation Manual

For distribution to dealers and contractors only
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### PAC-YK91RF-J

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Before installing the product, please read this Installation Manual carefully to ensure proper operation.  
Retain this manual for future reference.



# Manual Download



<http://www.mitsubishielectric.com/ldg/ibim/>

- en** Go to the above website to download manuals, select model name, then choose language.
- de** Besuchen Sie die oben stehende Website, um Anleitungen herunterzuladen, wählen Sie den Modellnamen und dann die Sprache aus.
- fr** Rendez-vous sur le site Web ci-dessus pour télécharger les manuels, sélectionnez le nom de modèle puis choisissez la langue.
- es** Visite el sitio web anterior para descargar manuales, seleccione el nombre del modelo y luego elija el idioma.
- it** Andare sul sito web indicato sopra per scaricare i manuali, selezionare il nome del modello e scegliere la lingua.
- pt** Aceda ao site Web acima indicado para descarregar manuais, seleccione o nome do modelo e, em seguida, escolha o idioma.
- tr** Kılavuzları indirmek için yukarıdaki web sitesine gidin, model adını ve ardından dili seçin.
- ru** Чтобы загрузить руководства, перейдите на указанный выше веб-сайт; выберите название модели, а затем язык.
- 中<简> 前往上述网站下载手册, 选择产品型号, 然后选择语言。

## Note

- en** Controller model is abbreviated as "AE-C" in this manual.
- de** Das Steuerungsmodell wird in diesem Handbuch mit „AE-C“ abgekürzt.
- fr** Le modèle de contrôleur est désigné par l'abréviation « AE-C » dans le présent manuel.
- es** El modelo del controlador se abrevia como «AE-C» en este manual.
- it** In questo manuale il modello di unità di controllo è abbreviato in "AE-C".
- pt** O modelo do controlador é abreviado como "AE-C" neste manual.
- tr** Kumanda birimi modeli bu kılavuzda "AE-C" şeklinde kısaltılmıştır.
- ru** В этом руководстве модель контроллера обозначается сокращенно — «AE-C».
- 中<简> 本手册中, 控制器型号简称为"AE-C"。

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# Safety precautions

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- ▶ Thoroughly read the following safety precautions prior to installation.
- ▶ Observe these precautions carefully to ensure safety.

 <b>WARNING</b>	: indicates a hazardous situation which, if not avoided, could result in death or serious injury.
 <b>CAUTION</b>	: indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.

- ▶ After reading this manual, pass the manual on to the end user to retain for future reference.
- ▶ The user should keep this manual for future reference and refer to it as necessary. The manual should be made available to those who repair or relocate the product. Make sure that the manual is passed on to any future air conditioning system user.

## ■ General precautions

### **WARNING**

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To reduce the risk of injury, electric shock, or fire, do not alter or modify the product.

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To reduce the risk of injury, keep children away while installing, inspecting, or repairing the product.

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### **CAUTION**

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To reduce the risk of injury, electric shock, or malfunction, do not touch the edges of the product.

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To reduce the risk of injury, do not hold the product by its edges.

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To reduce the risk of injury, wear protective gear before working on the product.

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## ■ Precautions for installation

### **WARNING**

Properly dispose of the packing materials. Plastic bags pose a suffocation hazard to children.

Installation work must be performed by the dealer or qualified personnel according to the instructions in the Installation Manual. Improper installation work or installation work performed by the user may cause trouble.

Take appropriate safety measures against earthquakes to prevent the product from falling and causing injury.

Install the product where the weight of the product can be held. Installation in a place with insufficient strength or improper installation may cause the product to fall, causing injury.

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## ■ Precautions for relocating or repairing the product

### **WARNING**

The product must be relocated or repaired only by qualified personnel. The user must not disassemble or modify the product. Improper installation or repair may result in injury, electric shock, or fire.

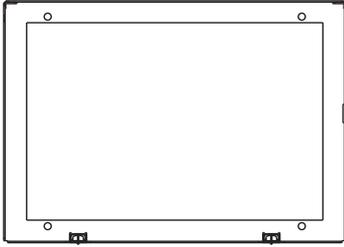
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# 1. Parts

## 1-1. Supplied parts

The package contains the following items.

- Transport them to the installation site as packed.

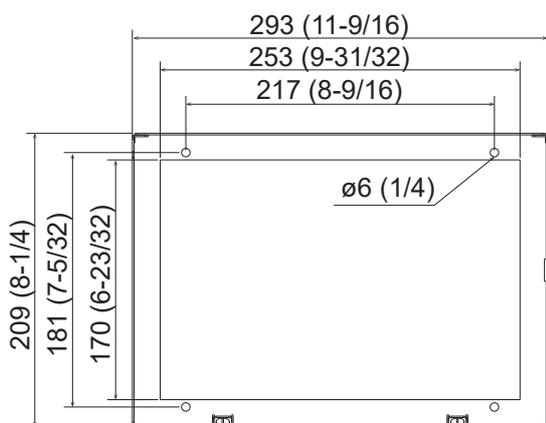
No.	Item	Shape	Quantity
D-1	Front plate		1
D-2	Rear plate		1
D-3	Flathead screw (M4 x 40)		4
D-4	Wood screw (M4.1 x 25) (Used to install the AE-C directly on a wall that can hold the weight of the AE-C, such as a gypsum-board wall.)		4
D-5	Roundhead screw (M3 x 6)		4 (Two spares)
D-6	Installation Manual (this manual)	—	1

## 1-2. Commercial parts

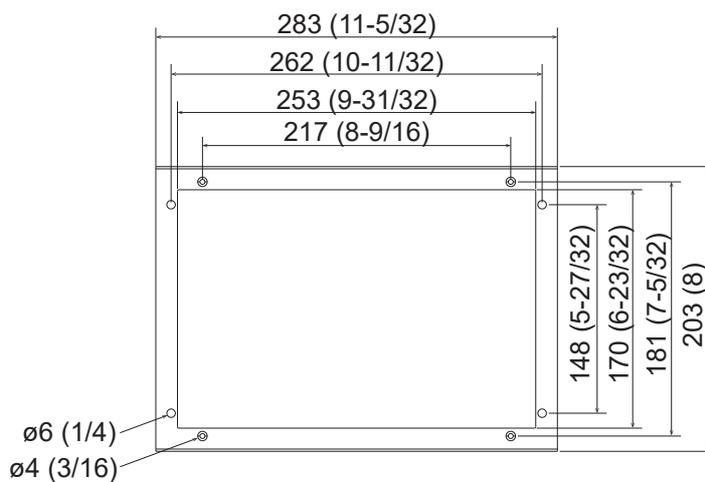
None.

### 1-3. External dimensions

Unit: mm (in.)



Front plate



Rear plate

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## 2. Overview of installation

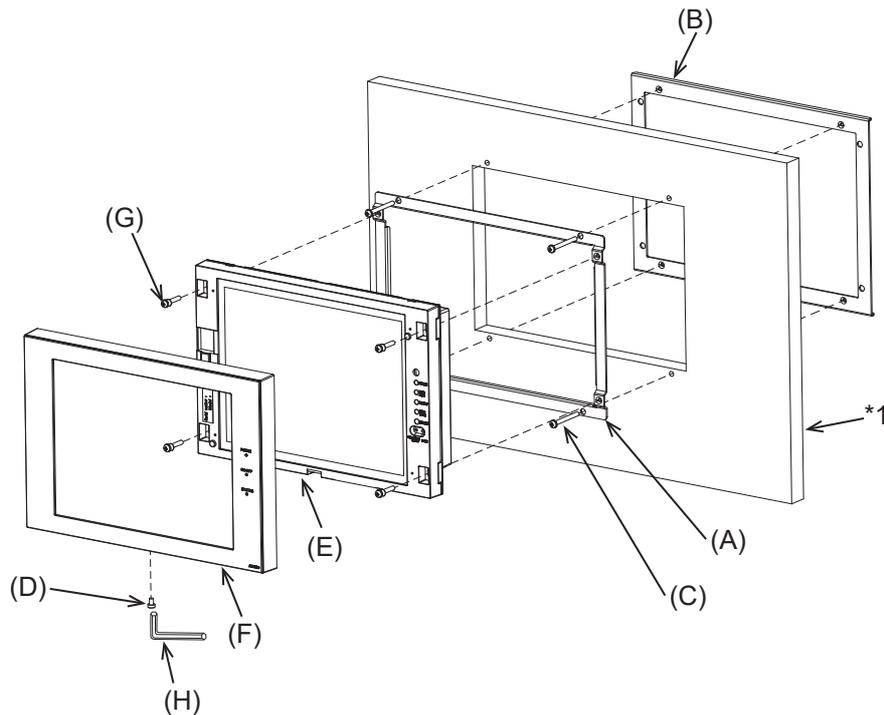
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### 2-1. Summary of the replacement procedure

The following is the procedure for replacing the existing AE-200 or AE-50 with the AE-C. The same replacement procedure applies to the AE-200 and the AE-50 because they are of the same shape.

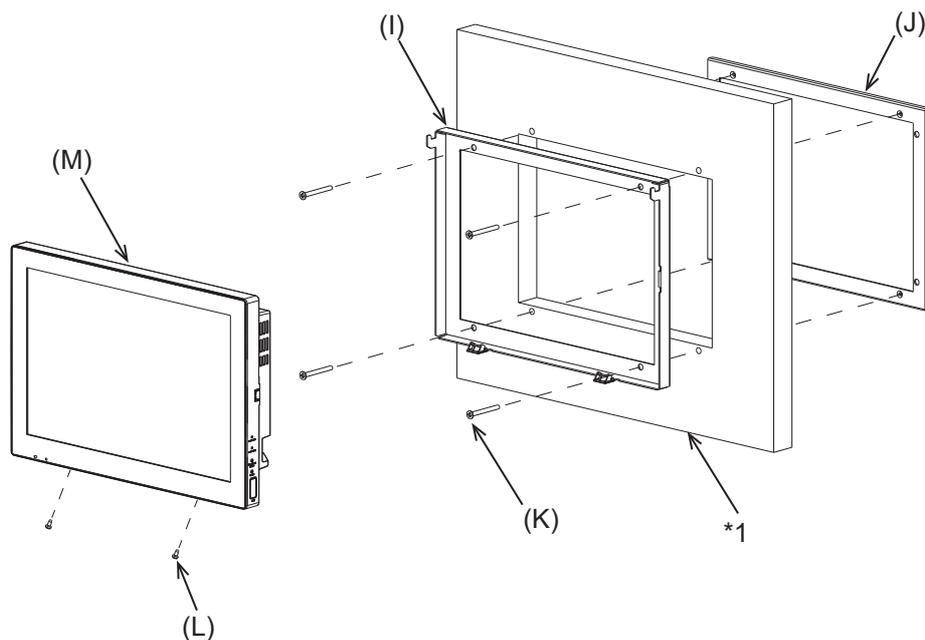
Step	Instruction
1	Make a memo or a backup of the current settings, if necessary. (Refer to the Instruction Book (Detailed Version) for AE-C/EW-C for how to make a backup.)
2	After obtaining approval from the client for turning off the AE-200, turn off the AE-200 or the power supply unit (and the outdoor and indoor units, if necessary).
3	Disconnect all cables from the AE-200.
4	Remove the hexagon socket head bolt, and remove the cover of the AE-200.
5	Unscrew the roundhead screws from the AE-200 to remove the AE-200 from the wall.
6	Unscrew the flathead screws from the AE-200 to remove the mounting plate A from the front of the wall and the mounting plate B from the back of the wall.
7	Sandwich the wall with the front plate (supplied part D-1) and the rear plate (supplied part D-2), and fasten them together, using the flathead screws (supplied part D-3). (The existing mounting holes can be used.) To install the AE-C directly on a wall that can hold the weight of the AE-C (such as a gypsum-board wall), use the wood screws (supplied part D-4) to install the front plate. In this case, the rear plate is not necessary.
8	Hook the AE-C onto the hooks of the front plate.
9	Fasten the AE-C to the front plate, using the roundhead screws (supplied part D-5).

## 2-2. Installation of AE-200 (reference for steps 4 through 6)



- (A) Mounting plate A
- (B) Mounting plate B
- (C) Flathead screw (M4 × 40)
- (D) Bolt for securing the AE-200 (hexagon socket head bolt)
- (E) AE-200
- (F) Cover of the AE-200
- (G) Roundhead screw (M4 x 10)
- (H) Hexagonal wrench (supplied with AE-200)
- \*1 Wall

## 2-3. Installation of AE-C (reference for steps 7 through 9)



- (I) Front plate (supplied part D-1)
- (J) Rear plate (supplied part D-2)
- (K) Flathead screw (M4 × 40) (supplied part D-3)
- (L) Roundhead screw (M3 × 6) (supplied part D-5)
- (M) AE-C
- \*1 Wall

### Note

- To install the AE-C directly on a wall that can hold the weight of the AE-C (such as a gypsum-board wall), use the wood screws (supplied part D-4) to install the front plate.

# 3. Selecting the installation site

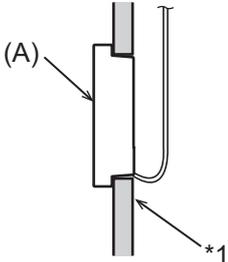
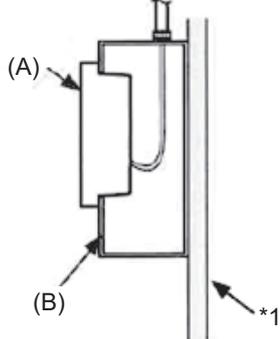
## **! WARNING**

Install the product where the weight of the product can be held. Installation in a place with insufficient strength or improper installation may cause the product to fall, causing injury.

Install the AE-C where the weight of the AE-C can be held. (The AE-C weighs approx. 3 kg (7 lb).)

Do not install the AE-C where it is subjected to continuous vibrations, which can cause the connectors to become loose or disconnected.

### 3-1. AE-200 replaceable with the AE-C, using the replacement attachment

<p>AE-200 installed on a wall</p> <p>(A) AE-200 *1 Wall</p>	
<p>AE-200 installed on a metal control box</p> <p>(A) AE-200 (B) Metal control box *1 Wall</p>	

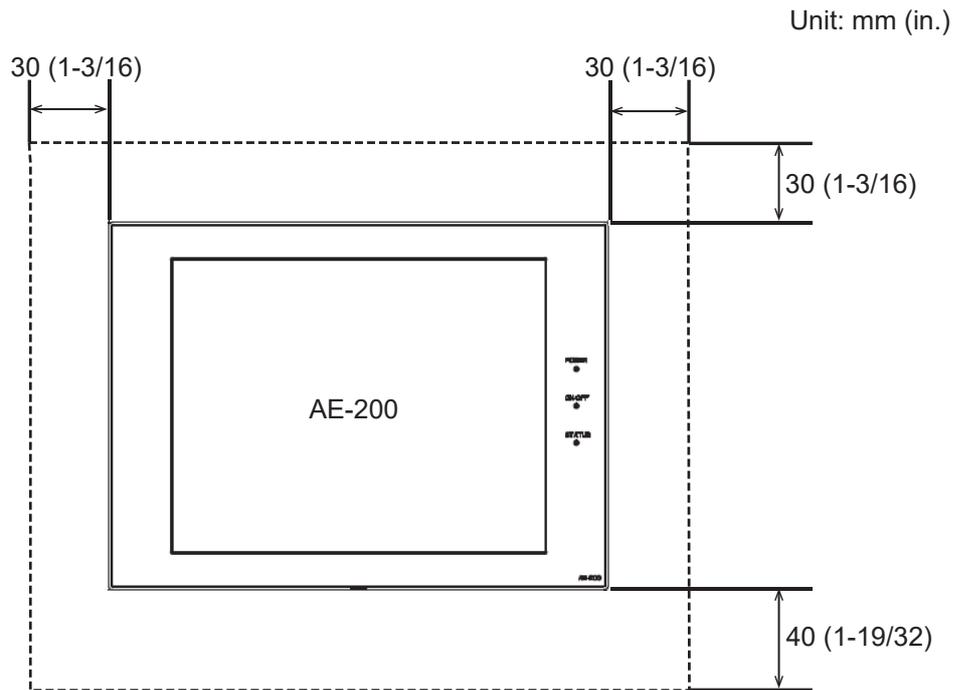
## 3-2. Installation space

Check that the required amounts of space is available around the AE-C, using either of the methods described below.

In particular, when installing the AE-C above an object (e.g., control box) with a greater depth than the AE-C, provide sufficient space under the AE-C so that the roundhead screws at the bottom of the AE-C can be accessed with a Phillips screwdriver.

### 3-2-1. Method for checking the space around the existing AE-200

Before replacing the existing AE-200, check that there are minimum spaces around the existing AE-200 as shown below.



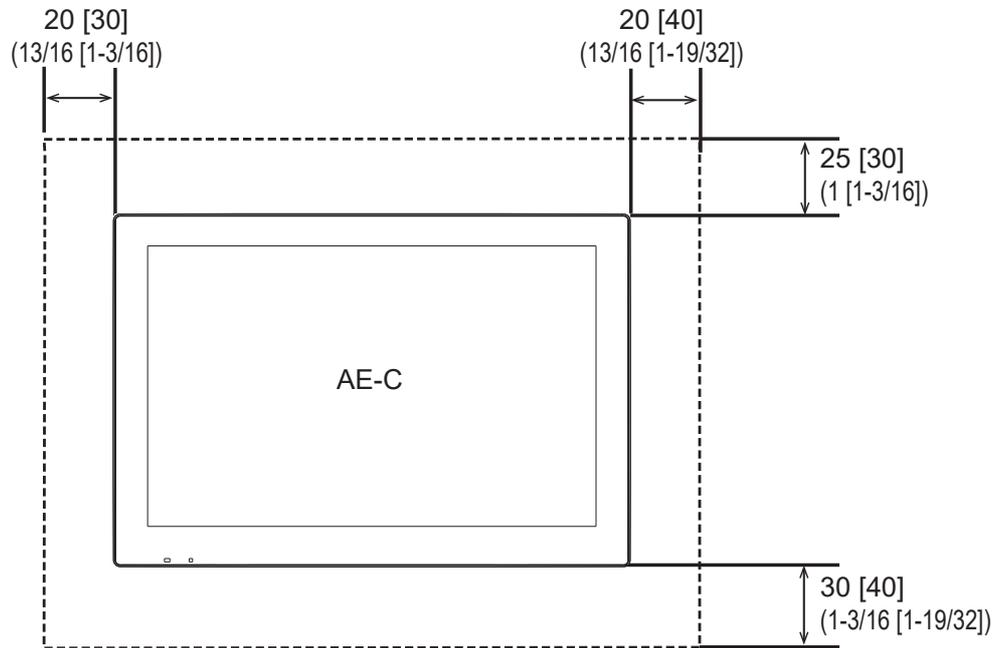
Required space around the existing AE-200

### 3-2-2. Method for checking the available space around the AE-C

Check that minimum spaces are available around the AE-C as shown below.

It is recommended to ensure the amounts of space shown in the brackets for ease of installation work, insertion of the USB memory device, and use of optional parts.

Unit: mm (in.)



Required space around the AE-C

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## 4. Installation

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### CAUTION

To reduce the risk of injury, electric shock, or malfunction, do not touch the edges of the product.

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#### 4-1. Progress of building construction and construction conditions

None.

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#### 4-2. Installation methods

##### 4-2-1. Preparation before installation

###### Step

1. Remove the existing AE-200.
  - Insulate the end of the disconnected cables, if necessary.

##### 4-2-2. Cutting a hole in the wall

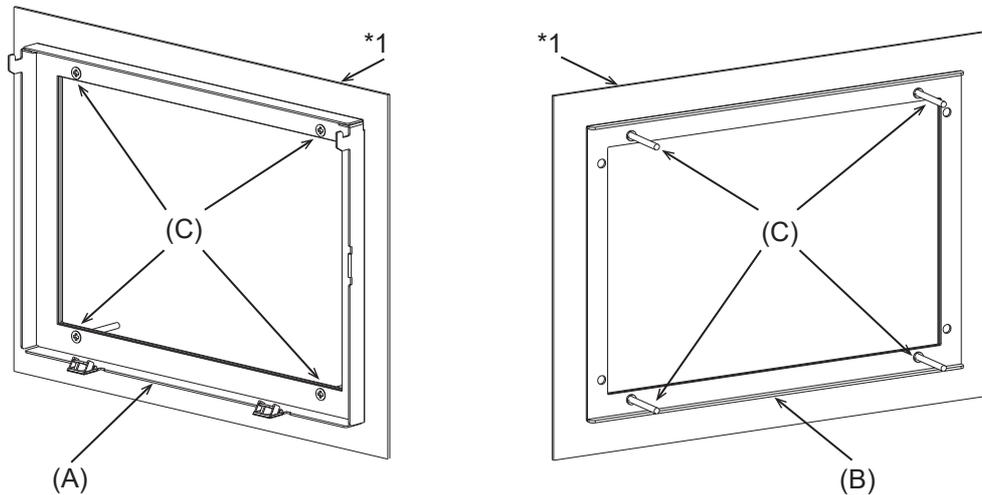
The openings or the mounting holes in the wall or the door of the metal control box for the existing AE-200 can be used to install the AE-C. No additional holes need to be made.

Reinforce the mounting holes in the wall (such as a gypsum-board wall), as necessary.

### 4-2-3. Installing the plates

#### Step

1. Sandwich the wall or the door of the metal control box with the front plate (supplied part D-1) and the rear plate (supplied part D-2), and fasten them together, using four flathead screws (supplied part D-3).
  - Hook the AE-C onto the front plate.
  - Do not overtighten the screws. (Specified torque: 0.2 to 0.3 N·m)  
Doing so may distort the plates and render the AE-C unmountable.
  - The front plate can be installed directly on a wall that can hold the weight of the AE-C (such as a gypsum-board wall), using wood screws (supplied part D-4). In this case, the rear plate is not necessary.



- (A) Front plate (supplied part D-1)  
(B) Rear plate (supplied part D-2)  
(C) Flathead screw (M4 × 40) (supplied part D-3)  
\*1 Wall or door of the metal control box

### 4-2-4. Installing the AE-C

Depending on how the AE-C is installed, connect cables to the AE-C before or after installing the AE-C.

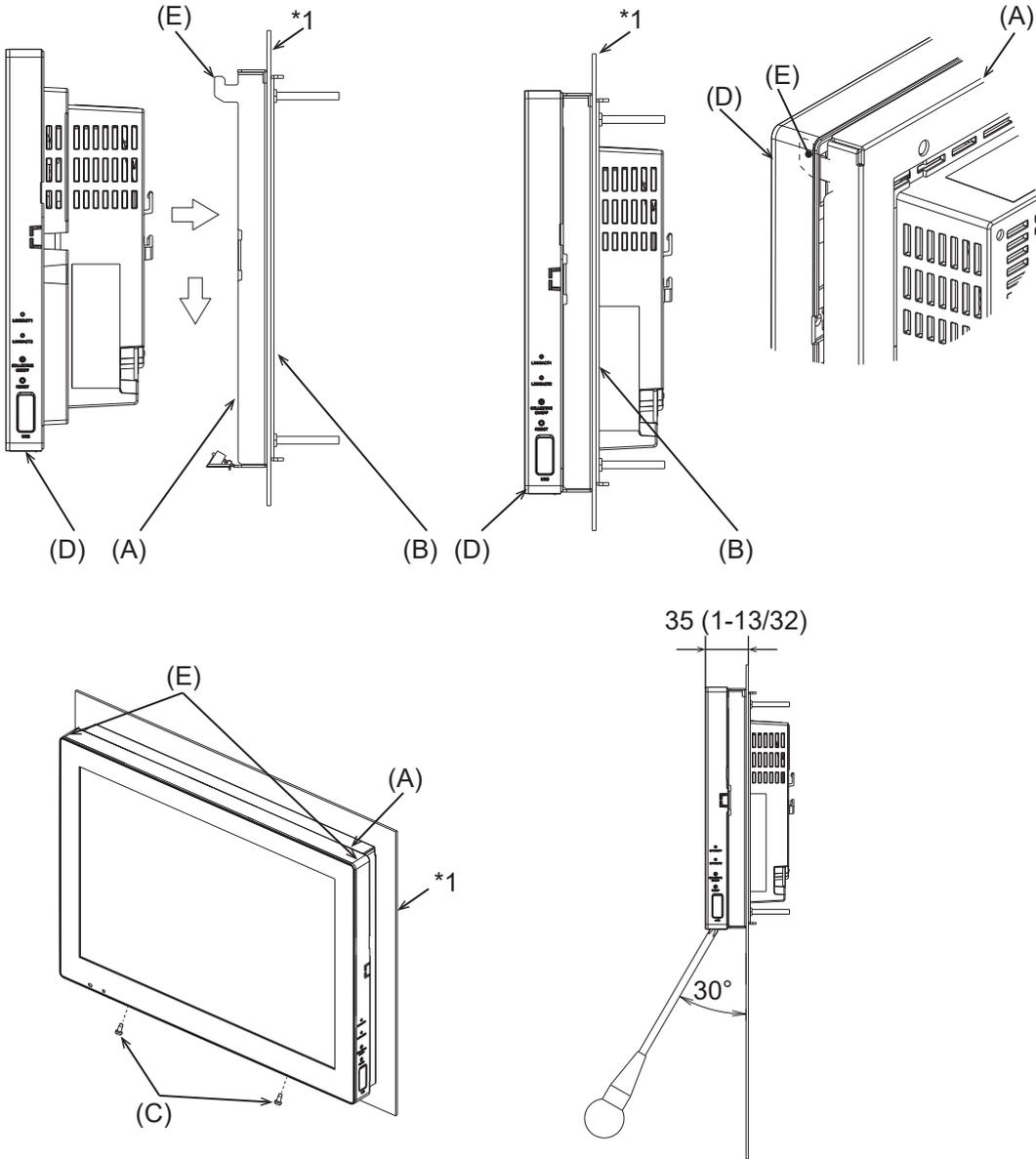
(Refer to the Installation Manual supplied with the AE-C for details of wiring.)

#### Step

1. Hook the top of the AE-C onto the two hooks of the front plate (supplied part D-1), and slide the AE-C down to temporarily let it hang.
2. Fasten the AE-C and the front plate together, using two roundhead screws (supplied part D-5).

#### Note

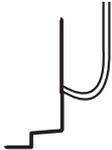
- The total amount of the protrusion from the wall surface will be 35 mm (1-13/32 in.), including the protrusion of the AE-C of 19.8 mm (25/32 in.) and the depth of the front plate.



- (A) Front plate (supplied part D-1)
- (B) Rear plate (supplied part D-2)
- (C) Roundhead screw (M3 × 6) (supplied part D-5)
- (D) AE-C
- (E) Hook
- \*1 Wall or door of the metal control box

**Note**

- When routing cables from above, let the cables hang loose behind the AE-C as shown in the figure below to prevent water from running down the cables into the connectors.



Good example



Bad example

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## 5. Electrical wiring

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Refer to the Installation Manual for the AE-C for details of wiring.

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# MEMO

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Please be sure to put the contact address/telephone number  
on this manual before handing it to the customer.

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