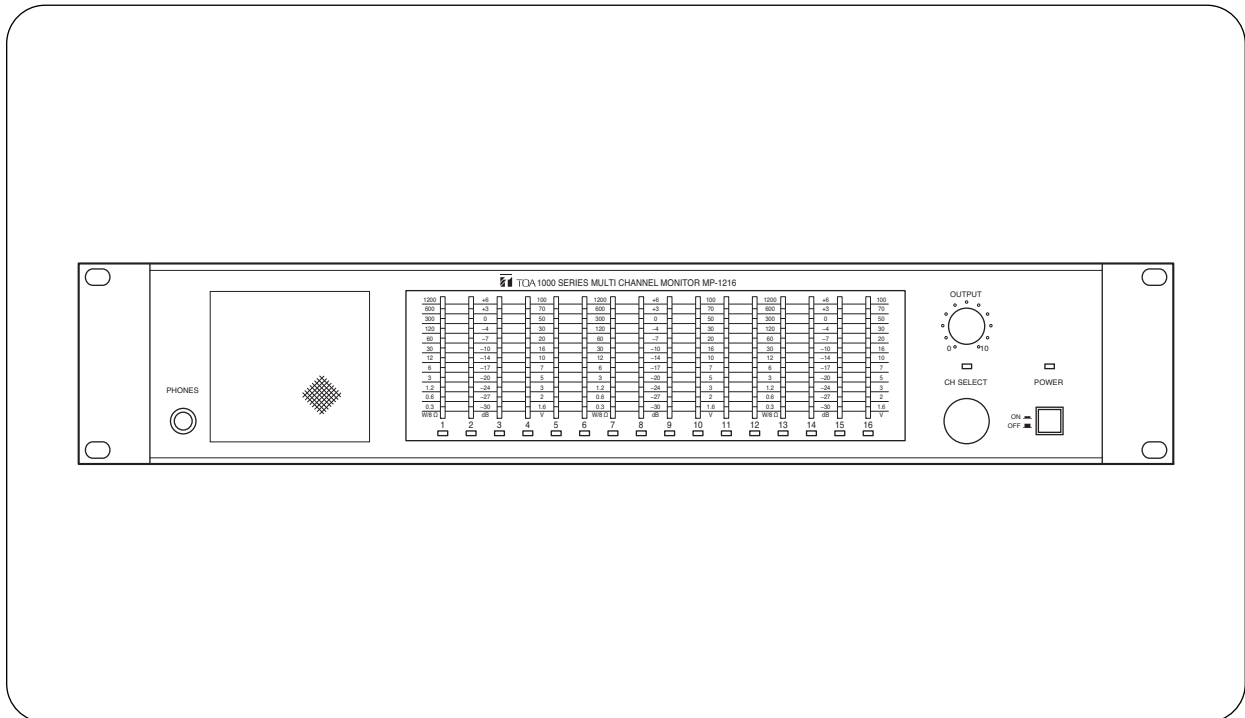


# MULTI CHANNEL MONITOR

# MP-1216




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Thank you for purchasing TOA's Multi Channel Monitor.  
 Please carefully follow the instructions in this manual to ensure long, trouble-free use of your equipment.

# 1. IMPORTANT SAFETY INSTRUCTIONS

- Read these instructions.
  - Keep these instructions.
  - Heed all warnings.
  - Follow all instructions.
  - Do not use this apparatus near water.
  - Clean only with dry cloth.
  - Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
  - Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
  - Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
  - Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
  - Only use attachments/accessories specified by the manufacturer.
  - Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
- 
- Unplug this apparatus during lightning storms or when unused for long periods of time.
  - Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

## INSTRUCTIONS ESSENTIELLES POUR LA SÉCURITÉ

- Lire ces instructions.
  - Conserver ces instructions pour référence ultérieure.
  - Respecter tous les avertissements.
  - Suivre toutes les instructions.
  - Ne pas utiliser cet appareil à proximité d'eau.
  - Nettoyer uniquement à l'aide d'un chiffon sec.
  - Ne pas obstruer les orifices de ventilation. Installer conformément aux instructions du fabricant.
  - Ne pas installer à proximité de sources de chaleur telles que des radiateurs, des registres thermiques, des chaudières ou d'autres appareils (notamment des amplificateurs) produisant de la chaleur.
  - Ne pas contourner la fonction de sécurité de la fiche polarisée ou de mise à la terre. Une fiche polarisée est équipée de deux broches, dont l'une est plus large que l'autre. Une fiche de mise à la terre est équipée de deux broches et d'une troisième pour la mise à la terre. Cette dernière, la plus large, est prévue à des fins de sécurité. Si la fiche fournie ne peut être insérée dans la prise électrique souhaitée, consulter un électricien pour faire remplacer cette dernière.
  - Protéger le cordon d'alimentation pour éviter qu'il ne soit piétiné ou pincé, notamment au niveau des fiches, des prises de courant ou de son point de sortie de l'appareil.
  - Utiliser uniquement les accessoires spécifiés par le fabricant.
  - Utiliser uniquement avec le chariot, support, trépied, la patte de montage ou la table spécifiés par le fabricant ou vendus avec l'appareil. En cas d'utilisation d'un chariot, manipuler la combinaison chariot/appareil pour éviter les blessures dues à un renversement.
- 
- Débrancher cet appareil pendant les orages ainsi que lorsqu'il reste inutilisé pendant une période prolongée.
  - La maintenance de l'appareil doit être confiée à un technicien après-vente qualifié. Une maintenance s'avère nécessaire si l'appareil est endommagé (au niveau du cordon d'alimentation ou de la fiche), a été mouillé par un liquide, un objet est tombé à l'intérieur, s'il a été exposé à la pluie ou l'humidité, s'il ne fonctionne pas normalement ou s'il est tombé.

## 2. SAFETY PRECAUTIONS

- Before installation or use, be sure to carefully read all the instructions in this section for correct and safe operation.
- Be sure to follow all the precautionary instructions in this section, which contain important warnings and/or cautions regarding safety.
- After reading, keep this manual handy for future reference.

### Safety Symbol and Message Conventions

Safety symbols and messages described below are used in this manual to prevent bodily injury and property damage which could result from mishandling. Before operating your product, read this manual first and understand the safety symbols and messages so you are thoroughly aware of the potential safety hazards.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operation and maintenance (servicing) instruction in the literature accompanying the appliance.



Le point d'exclamation à l'intérieur d'un triangle équilatéral avertit l'utilisateur de l'existence d'instructions d'utilisation et d'entretien (réparation) dans la documentation fournie avec l'appareil.



### **WARNING**

Indicates a potentially hazardous situation which, if mishandled, could result in death or serious personal injury.

#### When Installing the Unit

- Do not expose the unit to rain or an environment where it may be splashed by water or other liquids, as doing so may result in fire or electric shock.
- Use the unit only with the voltage specified on the unit. Using a voltage higher than that which is specified may result in fire or electric shock.
- Do not cut, kink, otherwise damage nor modify the power supply cord. In addition, avoid using the power cord in close proximity to heaters, and never place heavy objects -- including the unit itself -- on the power cord, as doing so may result in fire or electric shock.
- Be sure to attach the supplied terminal cover after connection completion. Because high voltage is applied to the speaker output terminals, never touch these terminals to avoid electric shock.
- Avoid installing or mounting the unit in unstable locations, such as on a rickety table or a slanted surface. Doing so may result in the unit falling down and causing personal injury and/or property damage.
- The apparatus shall be connected to a mains socket outlet with a protective earthing connection.
- The socket-outlet shall be installed near the equipment and the plug shall be easily accessible.

#### When the Unit is in Use

- Should the following irregularity be found during use, immediately switch off the power, disconnect the power supply plug from the AC outlet and contact your nearest TOA dealer. Make no further attempt to operate the unit in this condition as this may cause fire or electric shock.
  - If you detect smoke or a strange smell coming from the unit
  - If water or any metallic object gets into the unit
  - If the unit falls, or the unit case breaks
  - If the power supply cord is damaged (exposure of the core, disconnection, etc.)
  - If it is malfunctioning (no tone sounds.)
- To prevent a fire or electric shock, never open nor remove the unit case as there are high voltage components inside the unit. Refer all servicing to your nearest TOA dealer.
- Do not place cups, bowls, or other containers of liquid or metallic objects on top of the unit. If they accidentally spill into the unit, this may cause a fire or electric shock.
- Do not touch a power supply plug during thunder and lightning, as this may result in electric shock.
- When replacing the fuse, be sure to use the supplied one\*. Using any other fuse than supplied may cause fire or electric shock.

\* Fuse Rating: 250 V T250 mA (for 220 – 240 V version), 250 V 500 mA (for 120 V version)



## CAUTION

Indicates a potentially hazardous situation which, if mishandled, could result in moderate or minor personal injury, and/or property damage.

### When Installing the Unit

- Never plug in nor remove the power supply plug with wet hands, as doing so may cause electric shock.
- When unplugging the power supply cord, be sure to grasp the power supply plug; never pull on the cord itself. Operating the unit with a damaged power supply cord may cause a fire or electric shock.
- Do not block the ventilation slots in the unit's cover. Doing so may cause heat to build up inside the unit and result in fire.
- Avoid installing the unit in humid or dusty locations, in locations exposed to the direct sunlight, near the heaters, or in locations generating sooty smoke or steam as doing otherwise may result in fire or electric shock.
- Be sure to follow the instructions below when rack-mounting the unit. Failure to do so may cause a fire or personal injury.
  - Install the equipment rack on a stable, hard floor. Fix it with anchor bolts or take other arrangements to prevent it from falling down.
  - When connecting the unit's power cord to an AC outlet, use the AC outlet with current capacity allowable to the unit.
  - The supplied rack-mounting screws can be used for the TOA equipment rack only. Do not use them for other racks.

### When the Unit is in Use

- Make sure that the volume control is set to minimum position before power is switched on. Loud noise produced at high volume when power is switched on can impair hearing.
- Do not operate the unit for an extended period of time with the sound distorting. This is an indication of a malfunction, which in turn can cause heat to generate and result in a fire.
- Switch off the power, and unplug the power supply plug from the AC outlet for safety purposes when cleaning or leaving the unit unused for 10 days or more. Doing otherwise may cause a fire or electric shock.



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



L'éclair accompagné d'un symbole représentant une pointe de flèche à l'intérieur d'un triangle équilatéral avertit l'utilisateur de la présence d'une "tension dangereuse" à l'intérieur de l'enceinte du téléviseur, dont la magnitude peut être suffisante pour constituer un risque de choc électrique pour les personnes.



## ATTENTION

L'appareil ne doit pas être exposé aux éclaboussures ou écoulements et tous objets remplis de liquide, tels que vases, ne doivent pas être sur l'appareil.

### 3. GENERAL DESCRIPTION

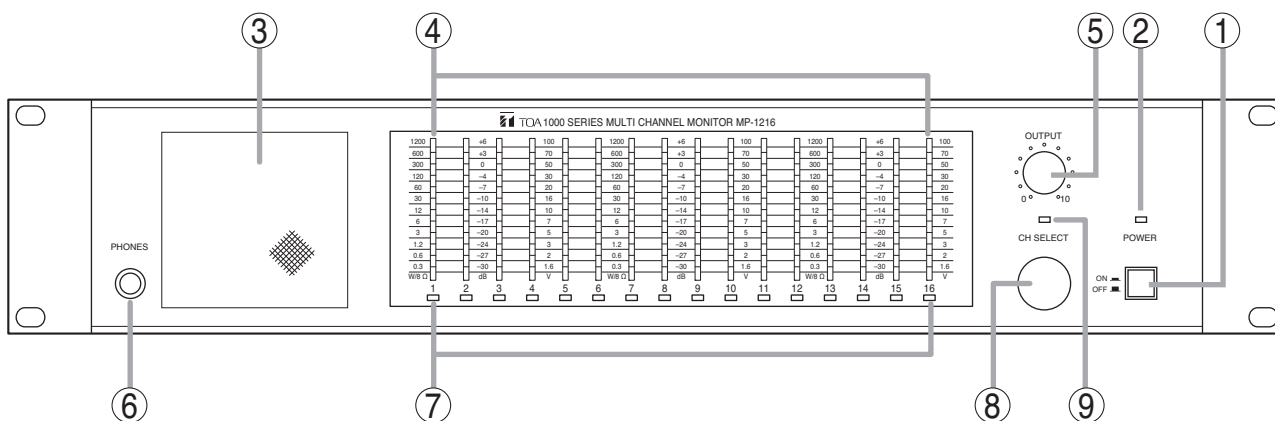
The MP-1216 Multi Channel Monitor is designed to simultaneously monitor up to 16 channels' signal levels by means of level meters. The built-in speaker and equipped headphone jack also allow aural monitoring of one of 16 channels' signals.

Signals that can be monitored are those of high-impedance speaker level, low-impedance speaker level, and line level.

By linking two MP-1216 units, up to 32 channels' signals can be monitored.

### 4. NOMENCLATURE AND FUNCTIONS

[Front]



**1. Power Switch [ON, OFF]**

Press this switch to turn on the power. To turn off the power, press this switch again.

**2. Power Indicator [POWER]**

Lights when the power switch is set to ON.

**3. Speaker**

Outputs the sound of the channel selected with the Channel Selector Knob (8).

**4. Level Meters (1 – 16)**

Indicate the signal level of each channel.

**5. Volume Control Knob [OUTPUT]**

Adjusts the sound volume of the speaker or headphones.

**6. Headphone Jack [PHONES]**

Connect headphones to this jack to monitor sound output of the channel selected with the Channel Selector Knob (8). In this case, no sound is output from the built-in speaker.

**7. Channel Indicators (1 – 16)**

Light to indicate the channel currently being monitored via the built-in speaker or headphones. The 16th channel's indicator lights whenever the power is switched ON.

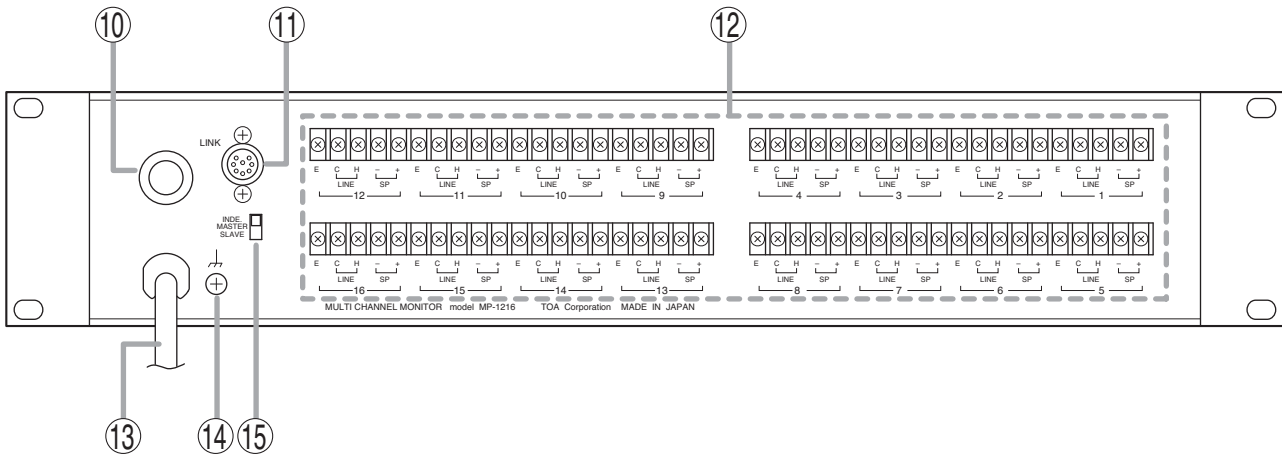
**8. Channel Selector Knob [CH SELECT]**

Selects the channel to monitor via a built-in speaker or headphones.

**9. Channel Selector Knob Indicator**

Lights when the Channel Selector Knob is enabled. For the unit set to "Slave" by the Linkage setting switch (15), this indicator remains unlit.

## [Rear]



### 10. AC Fuse Holder

When replacing, be sure to use a fuse of the same type and rating (see below) as the one installed.

#### Fuse rating:

- 250 V 500 mA for MP-1216 US (120 V version)
- 250 V T250 mA for MP-1216 H and MP-1216 SA (220 – 240 V version)

### 11. Linkage Socket [LINK]

8P DIN socket.

Insert an optional linkage cable (YA-8) into this socket when linking two MP-1216 units.

### 12. Input Terminals (1 – 16)

Connect a line signal to the LINE (H: Hot, C: Cold, and E: Ground) terminals, and a speaker signal (high or low impedance) to the SP (+, –) terminals. Short-circuit between "C" and "E" terminals using the supplied jumper strip when the line signal to be input is of unbalanced type. In this case, if loop hum noise occurs, remove the jumper strip, then connect the line signal to the "H" and "C" terminals. Be sure to replace the unit's terminal cover after connection completion.

### 13. AC Power Cord

Plug the Power Cord into an AC outlet.

### 14. Functional earth terminal

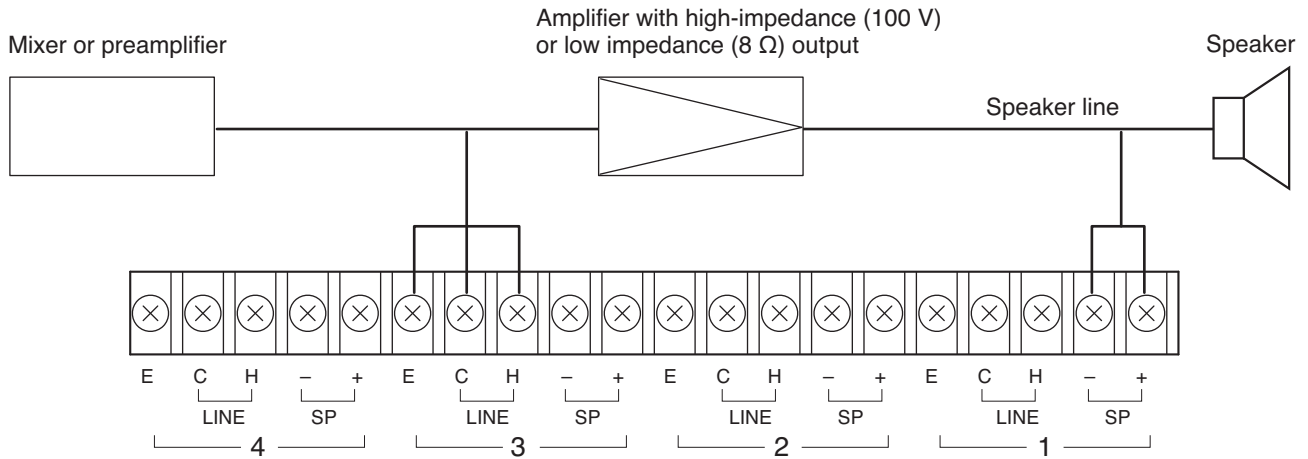
Hum noise may be generated when external equipment is connected to the unit. Connecting this terminal to the functional earth terminal of the external equipment may reduce the hum noise.

**Note:** This terminal is not for protective earth.

### 15. Linkage Setting Switch [INDE./MASTER/SLAVE]

Set this switch to INDE. position for a single unit operation. When linking two units, set the switch of one determined as "Master" unit to MASTER position and that of one determined as "Slave" unit to SLAVE position.

## 5. CONNECTION EXAMPLE

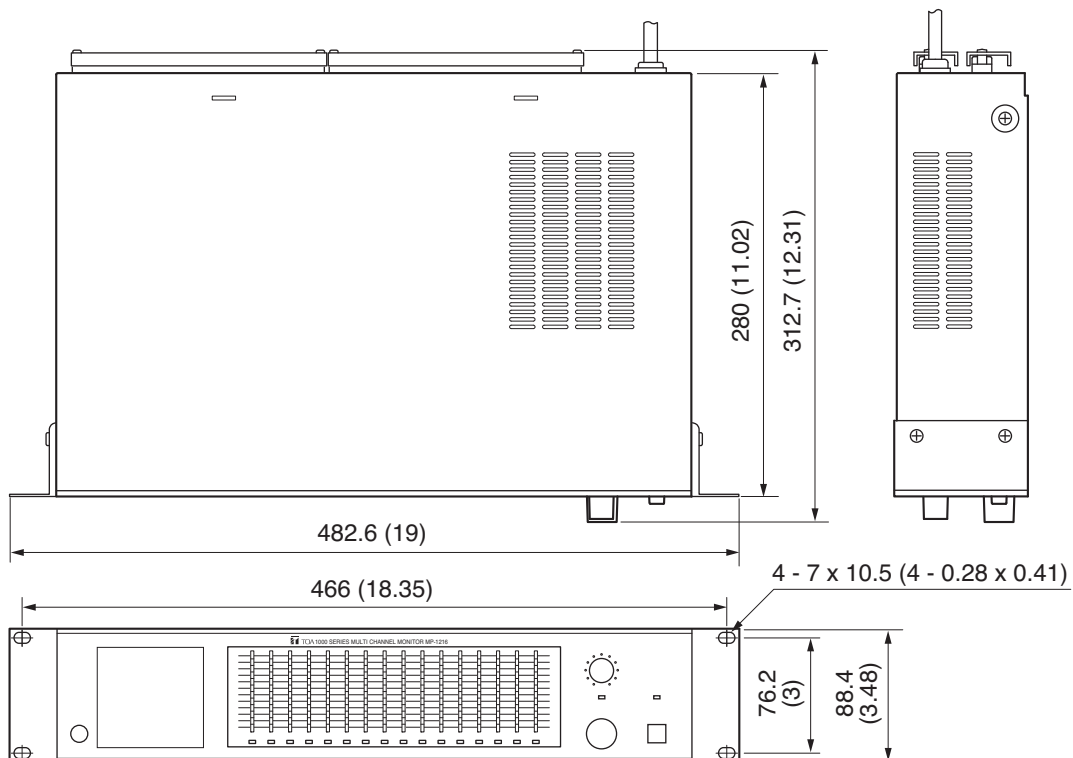


## 6. INSTALLATION PRECAUTIONS

- Keep the power amplifier's input cables as far away as possible from its output cables. Also, avoid routing high-impedance speaker cables near the input terminals of other channels. Failure to observe these instructions may cause oscillation or crosstalk.
- When mounting the unit next above power amplifiers, mount a 1U blank panel between them.

## 7. DIMENSIONAL DIAGRAM

Unit: mm (inch)



## 8. SPECIFICATIONS

Model No.	MP-1216 US	MP-1216 H, MP-1216 SA
Power Source	120 V AC, 60 Hz	220 V – 240 V AC, 50/60 Hz
Power Consumption	21 W	25 W
Max. Display Level	Speaker High impedance: 100 V (speaker line) Low impedance: 1200 W/8 Ω (speaker line) Line level: +10 dB* (2.45 V)	
Speaker Output	Max. 3 W	
Headphone Output	8 Ω	
Finish	Front panel: Alumite, black	
Dimensions	482.6 (w) x 88.4 (h) x 312.7 (d) mm (19" x 3.48" x 12.31")	
Weight	5.3 kg (11.68 lb)	
Accessories	AC fuse, 250 V 500 mA ..... 1 Rack mounting screw ..... 4 Jumper strip ..... 16	AC fuse, 250 V T250 mA L ..... 1 Rack mounting screw ..... 4 Jumper strip ..... 16

\* 0 dB = 0.775 V

**Note:** The design and specifications are subject to change without notice for improvement.

### Warning

This equipment is compliant with Class A of CISPR 32. In a residential environment this equipment may cause radio interference.

### Traceability Information for Europe

Manufacturer:  
 TOA Corporation  
 7-2-1, Minatojima-Nakamachi, Chuo-ku, Kobe, Hyogo,  
 Japan

Authorized representative:  
 TOA Electronics Europe GmbH  
 Suederstrasse 282, 20537 Hamburg,  
 Germany

URL: <http://www.toa.jp/>