

# SONY®

Audio Conference Systems

## SX-M700A

## SX-M10A



# ***Conference Management Do it the Sony Way***

**T**he superb performance of Sony audio conference systems has led to their widespread use at major international conferences and summit meetings - winning critical acclaim from governments and institutions worldwide. Sony market leadership is the result of long-term experience and active commitment to audio technology, and a real understanding of the conference environment.



# ***with Style -***

To meet these needs, Sony has developed two audio conference systems: the SX-M700A with simultaneous interpretation capabilities, and the SX-M10A for single language conferences. These systems can be configured as portable units or for permanent installation. By connecting to a Sony videoconference system, users can hold a remote meeting with superb sound quality. The optional conference management software allows the SX-M700A to provide enhanced microphone control and helpful visual information that includes a display of the delegates' seating layout. Both the SX-M700A and SX-M10A systems are easy to operate and offer exceptional system expandability. Their refined design blends unobtrusively into conference surroundings. In any kind of decision-making applications from international conferences to corporate meetings and symposia, the SX-M700A and SX-M10A systems provide ideal audio conference solutions.





# Features

## Easy and Convenient Operation for Smooth, Controlled Conference Proceedings

The SX-M700A and SX-M10A systems help to enhance conference proceedings with simple design and easy operation. One-touch operation on individual Delegate's Units allow for unobtrusive conference participation, and the flexible microphone design provides optimum speech pick-up for clear, crisp audio communication. When using the SX-M700A at international conferences, language translation is easy using the six-way channel selector. The control panel buttons of the SX-P700 Interpreter's Unit are equipped with LED illumination so that the interpreters can easily check the status for their units, even in low ambient light conditions. The optional SX-GS10 Conference Management Software is another valuable tool for the SX-M700A in the smooth operation of a conference, displaying delegate seating and microphone status.

## Superb Sound Performance Inherited from the Sony Commitment to Audio Technology

High sound quality is essential at conferences where important discussions take place and where every word has to be heard without ambiguity. A key advantage of the SX-M700A and SX-M10A is advanced Sony audio technology, which has an enviable, worldwide reputation. These systems also are

specially designed to match human auditory characteristics to provide clarity and natural sound quality. As a result, conference participants can take part in long discussion sessions without suffering "listener fatigue." To further maintain sound quality, both the Chairman's and Delegate's Units have long, flexible microphone mountings providing excellent sound pick-up. A feedback suppression function is also included, which mutes loudspeakers that are adjacent to a 'live' microphone, thus enhancing the overall sound.

## Applicable in Any Kind of Conference Setting

### ■ For Permanent or Temporary Conferences

Conferences are held in various venues: from formal boardrooms to more informal settings. Two styles of Chairman's and Delegate's Units are available for the SX-M700A and SX-M10A system. They include a flush-mount (SX-C750/D750) and a portable style (SX-C700A/D700A/C100A/D100A). The flush-mount units are suitable for custom installations where the conference system remains permanently in the room. The portable units are ideal for those that need to move the system from room to room, even on a daily basis, and enables virtually any suitable venue to be quickly converted into a sophisticated conference room. This type of system is a perfect solution for rental applications because of the simplicity of installation and dismantling.

### ■ For Multilingual or Single Language Conferences

Multilingual interpretation is an essential part of today's international conferences. To meet the demand for simultaneous multilingual interpretation, Sony has designed the SX-P700 Interpreter's Unit that, when used with the SX-M700A, allows the handling of six different languages. Providing essential functions for simultaneous translation - including a SLOW switch, COUGH CUT switch, a RELAY interpretation function and much more - the SX-P700 also offers user-friendly operation and high sound quality, features that are of vital importance to interpreters. Function buttons are ergonomically arranged on the control panel of the SX-P700 to greatly reduce the chance of misoperation during critical conference debates. If multilingual discussion is not required, the SX-M10A System should be chosen.

### ■ Optional Conference Management System

Effective control of the delegates' microphones is a key element in the smooth operation of a conference. The optional SX-GS10 Conference Management Software, running on a PC, allow a graphic layout of the delegates' seating to be easily created and modified. Also, the chairperson or operator can see at a glance who is requesting to speak. This software can enhance the conference even further by controlling video cameras so that they will show the person speaking.

## SX-M700A System

The SX-M700A Simultaneous Interpretation Conference System is a fully featured system including six-language interpretation capability, easy operation, a feedback suppression function and much more. The system components include the Sony SX-M700A Control Unit, SX-C700A/SX-C750 Chairman's Unit, SX-D700A/SX-D750 Delegate's Unit, SX-P700 Interpreter's Unit and SX-E120A Expansion Unit. The system is ideal for international conferences and meetings, which require language translation.

If a video conference is required, the SX-M700A can be connected to a Sony PCS-1600 series or PCS-6000 series videoconference system.

## SX-M10A System

The SX-M10A System serves as a basic discussion system. The main system components are the SX-M10A System, SX-C100A Chairman's Unit and SX-D100A Delegate's Unit. The SX-M10A System enhances the effectiveness of a conference by increasing the speed and accuracy of information interchange. This system suits applications such as discussions and seminars at corporations, institutions, government offices and schools.

If a remote conference is required, the SX-M10A can be connected to a Sony PCS-1600 series or PCS-6000 series videoconference system thereby adding live video and integrated control of the preset camera positions.

### SX-M700A Control Unit

The SX-M700A Control Unit is a central part of a simultaneous interpretation conference system configuration.

- Capable of handling up to six languages.
- Accommodates up to 60 Chairman's and Delegate's Units as standard.
- Equipped with a feedback suppression function.
- Microphone Limit function  
When the MIC LIMIT button is pressed, microphones of only five Delegate's Units can be live at any time.
- External audio input and microphone input.
- Capable of connecting an external frequency equalizer.
- External computer control via an RS-232C interface port with the optional SXA-120 Expansion Board.
- Audio inputs and outputs for a Sony PCS-1600 series or PCS-6000 series videoconference system.
- 19-inch rack mountable with the optional SXA-2U rack mount bracket.



SX-M700A Control Unit

### SX-M10A Control Unit

The SX-M10A is for use in single language applications and controls the entire system, including the microphone volume, speaker volume and monitoring levels of the Delegates' Units.

- Accommodates up to 30 Chairman's and Delegate's Units as standard.
- Equipped with a feedback suppression function.
- Microphone Limit function  
When the MIC LIMIT button is pressed, microphones of only five Delegate's Units can be live at any time.
- Capable of audio input and output to a Sony PCS-1600 series or PCS-6000 series videoconferencing system.
- Capable of preset camera position control of the Sony PCS-1600 series or PCS-6000 series videoconference system.
- 19-inch rack mountable with the supplied 1U rack mount bracket.



SX-M10A Control Unit

## SX-E120A Expansion Unit

The SX-E120A Expansion Unit enables the SX-M700A System to handle up to 120 Chairman's and Delegate's Units.

- Maximum of 120 Chairman's and Delegate's Units can be connected with the optional SXA-120 Expansion Board installed in the SX-M700A.
- Easy connection to the SX-M700A Control Unit with a single cable.
- Power linked to the SX-M700A control unit. The POWER CONTROL switch setting can automatically turn on the power to the SX-E120A, when the SX-M700A is turned on.
- 19-inch rack mountable with the optional SXA-2U rack mount bracket.



SX-E120A Expansion Unit

## SX-P700 Interpreter's Unit

The SX-P700 is an Interpreter's Unit accommodating up to six simultaneous interpretation channels. With comprehensive functions and easy user operations, the SX-P700 allows the multilingual interpretation of conference discussions to proceed smoothly.

- Supports simultaneous interpretation of up to six languages when a corresponding number of SX-P700 units are connected to the SX-M700A Control Unit.
- Dual microphone inputs for use by two interpreters, allowing them to work in-turn over long periods of time.
- Push-type microphone select button for instant and easy changeover between microphone channels.
- Monitor output for use by a waiting interpreter.
- SLOW switch to give a warning to the chairperson.
- COUGH CUT switch to temporarily mute the microphone.
- Highly visible microphone ON indicator.
- Line output for an external monitoring amplifier and speaker.



SX-P700 Interpreter's Unit

## Chairman's Unit/Delegate's Unit

A wide variety of Chairman's and Delegate's Units meet the needs of conference environments from formal boardrooms to more informal settings. The SX-C750/SX-D750 are flush-mount-type units suitable for custom installation. The SX-C700A/SX-D700A and SX-C100A/SX-D100A are portable units ideal for temporary systems. If multilingual discussion is not required, the SX-C100A/SX-D100A are appropriate choices.

- Self-contained, with built-in uni-directional electret microphone and speaker.
- Excellent sound pick-up with a long flexible microphone stem.
- Flush-mount design (SX-C750/D750).
- Portable design (SX-C700A/D700A/C100A/D100A).



SX-C700A



SX-D700A



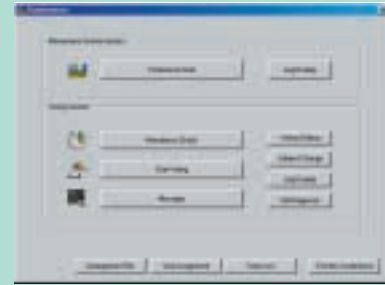
SX-C750



SX-D750

# SX-GS10 Conference Management Software

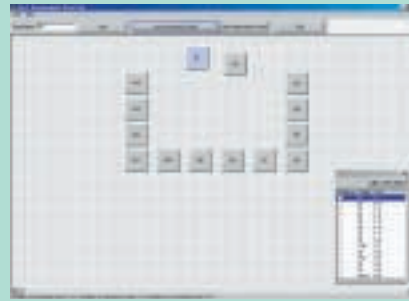
- Enhances control of the on/off switching of Delegate's Units' microphones.
- Easy and friendly graphic user interface using a PC.
- Simple on-screen creation of the conference layout using a seat icon.
- Delegate's name and request-to-speak list appear on the screen.
- Inputs and displays delegate's data on the screen.
- Accommodates up to 120 Delegate's Units.
- Controls the speaker volume of the Delegate's Units to suppress feedback.



Start Conference



Main Menu



Seat Arrangement



Microphone Control

- Six simultaneous interpretation language channels (SX-C700A/D700A/ C750/D750)
- Microphone Live indicator.  
The microphone indicator lights when the user presses the MIC ON switch.
- Easy operation so that everyone can use the system comfortably.

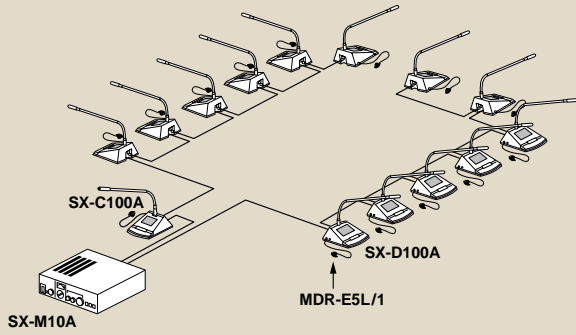
- PRIORITY switch (SX-C700A/C750/C100A) allowing the chairperson to exercise control over the conference, temporarily muting all microphones of the Delegate's Units.
- Audio output for tape recorder connection.
- Dual earphone outputs to allow two users to share a unit.  
The MDR-E5L/1 Earphone is available as an option.



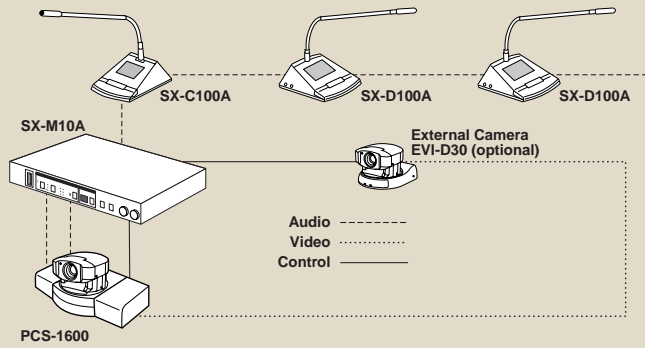
	For simultaneous proceedings	For single language proceedings
For installation	SX-C750/SX-D750	—
For portable use	SX-C700A/SX-D700A	SX-C100A/SX-D100A

# System Configurations

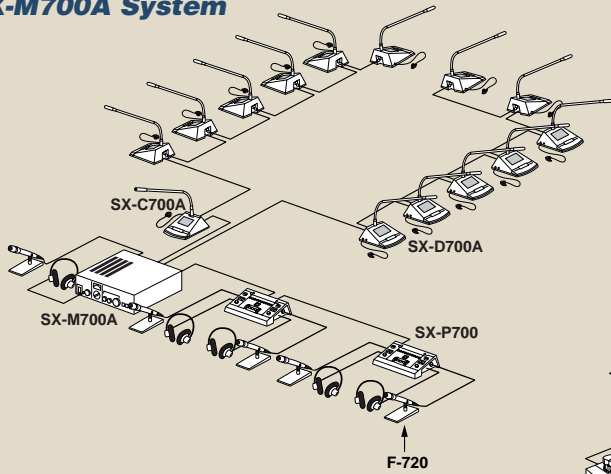
## SX-M10A System



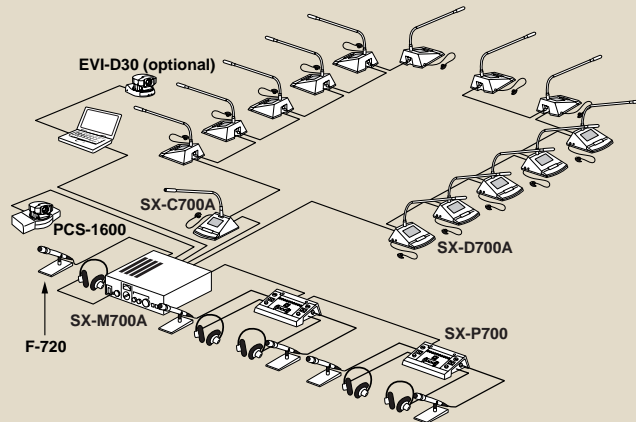
## SX-M10A with Videoconference System



## SX-M700A System



## SX-M700A with Videoconference System





## Enhanced Operation when Connected with a Sony Videoconference System.

### ■ Combine Video and Audio for an Integrated Solution

The SX-M700A or SX-M10A, combined with a Sony videoconference system, provides superb sound quality with the impact of live video.

### ■ Conference System Control

The SX-M10A Conference Control Unit features one touch conference control capability that makes it easy to focus on the conference participants and the issues at hand.

### ■ Preset Camera Positions

With the SX-M10A Conference System Control Unit, the videoconference camera automatically captures individual speakers during a conference. As delegates press their MIC ON button to speak, the camera zoom, pan, and tilt functions are automatically changed to corresponding preset positions. In this way, remote conferencing takes place as though everyone is at the same location, with all participants able to clearly hear and see each speaker.

- ▶ The camera will move sequentially to each speaker in the order that the MIC ON button is pressed signaling their desire to speak.
- ▶ Up to six preset combinations of camera zoom, pan and tilt can be memorized. One combination can be used as "Home Position" if required.

▶ A second video camera can be controlled by the SX-M10A to provide an additional six preset shots, making a total of twelve.

### ■ Natural Conversation Between Videoconference Participants with SX-M10A

Selecting the "V CONF MODE" allows all participants to easily converse within a videoconference. This function allows everyone to speak and hear freely with minimum manipulation of the Delegates' Units, and enhances the effectiveness of the preset camera position control capability.

▶ So, even if the MIC ON button is not pressed, all speakers' voices are automatically transmitted to the other participants at a remote location. If a delegate presses the MIC ON button, the built-in speakers of the delegates' units will operate in one of two ways. If ten or less delegates' units are in use, their built-in speakers are not amplified. If more than ten units are in use, the built-in speakers (except for those of the person talking and those adjacent to him / her) are amplified.

### ■ Superb Sound Performance

To clearly communicate, audio is an essential aspect of an effective conference. Sony's Chairman and Delegate Units, provide optimum speech pick-up for clear, crisp audio communication. Built-in, uni-directional electret microphones provide excellent sound quality eliminating distraction from outside noise. The echo cancellation

function, which is part of the Sony videoconference system, contributes to fine sound quality as well.

### ▶ SX-C100A/D100A

Chairman's/Delegate's Units are self-contained, with built-in uni-directional electret microphone and speaker. Up to 30 units can be connected to one SX-M10A.

▶ Echo cancellation is included in Sony PCS-series videoconference systems.

### ■ Easy Setup

The SX-M10A is portable and easy to set-up in any room. Basic connections between the videoconference and audio conference systems will provide for your conference proceedings with minimal effort.

### ■ SX-M10A Additional Features

- ▶ Operates with Sony PCS-1600 series and PCS-6000 series videoconferencing systems.
- ▶ Easy setting of camera zoom, pan and tilt presets.
- ▶ Return time to "Home Position" selectable to 1, 2, 3 or 5 seconds.
- ▶ Several Chairman's/Delegate's Units can be assigned to select the same preset position.
- ▶ PRIORITY switch on the Chairman's Unit allows the chairperson to exercise control over a conference by temporarily muting all delegate microphones.
- ▶ An audio input connector for an external microphone is supported.



# Peripheral Equipment



### **SXA-120 Expansion Board**

- Allows an SX-M700A System to accommodate up to 120 participants.
- RS-232C interface port allows operation from an external computer.
- Dimensions: 5 3/8 x 1 7/16 x 12 1/8 inches (136 (W) x 35 (H) x 305.7 (D) mm)
- Weight: 7 oz (0.2 kg)



### **MDR-E5L/1 Earphone**

- Earphone for SX-C700A/SX-D700A/SX-C100A/SX-D100A/SX-C750A/SX-D750A



### **SXA-2U Rack Mount Bracket**

- To install the SX-M700A or SX-E120A/.



### **F-720 Uni-Directional Dynamic Microphone**

- Efficient one-piece shockmount to reduce external noise and vibration.
- Replaceable capsule.
- XLR female connector.

## Conference Management Software

### **SX-GS10 Software System Requirements**

- IBM compatible personal computer with Microsoft Windows 98SE or later running at 200 MHz or more.
- Hard disk drive of 64 MB or more, 50 MB of available hard disk space and a 3.5-inch floppy disk drive.
- Monitor with SVGA graphics capability (800 x 600 pixels or higher).
- For use with SX-M700A.

## Connecting Cables



### **RK-1705 Connecting Cable**

- 5 m connecting cable for use between the SX-M700A and SX-P700, or between SX-P700 units.
- 20-pin round female connector at each end.

### **RK-1700 Connecting Cable**

- 10 m connecting cable for use between the SX-M700A and SX-P700, or between SX-P700 units.
- 20-pin round female connector at each end.

### **RK-1713 Connecting Cable**

- 3 m connecting cable for use between the SX-M700A/SX-M10A and SX-C700A/D700A/C100A/D100A or between the SX-C700A/C100A and SX-D700A/D100A.
- 20-pin round male connector and 20-pin round female connector.
- Can be interconnected to increase length.
- Can be used as an extension cable for the RK-1700/1705.

### **RK-1710 Connecting Cable**

- 10 m connecting cable for use between the SX-M700A/SX-M10A and SX-C700A/D700A/C100A/D100A or between the SX-C700A/C100A and SX-D700A/D100A.
- 20-pin round male connector and 20-pin round female connector.
- Can be interconnected to increase length.

*Can be used as an extension cable for the RK-1700/1705.*

### **RK-1515 Connecting Cable**

- Used to interconnect SX-M700/SX-M10 with flush-mount style Chairman's/Delegate's Units, SX-C750/D750.
- Length: 1.5 meters.
- Connectors: 20-pin round female, to 15-pin D-sub female.

### **RK-1503 Connecting Cable**

- Used to interconnect flush-mount style Chairman's/Delegate's Units, SX-C750/SX-D750
- Length: 3 meters.
- Connectors: 15-pin D-sub male, to 15-pin D-sub female.
- Also can be used to extend RK-1515 cable length.

# Specifications



SX-M700A Control Unit Rear Panel

SX-M700A Control Unit		
<b>Input/output connectors:</b>	DELEGATE'S/CHAIRMAN'S UNIT	20-pin multi-connector male (4)
	INTERPRETER'S UNIT	20-pin multi-connector male (2)
<b>Input:</b>	MIC-1(EXT IN-1)	XLR 3-pin connector (Balanced) (1), input level: -60 dBu, impedance: 3.3 k $\Omega$
	MIC-2 (EXT IN-2)	Phone jack (Unbalanced, x2), input level: -60 dBu, impedance: 3.3 k $\Omega$
	LINE (EXT IN-1and EXT IN-2)	Phono jack (2), input level: -10 dBu, impedance: 10 k $\Omega$
	AUDIO IN (From PCS-1600)	Phono jack (1), output level: -10 dBu, impedance: 10 k $\Omega$
	EXT UNIT IN	Phone jack (1), input level: +4 dBu, impedance: 10 k $\Omega$
<b>Output:</b>	PHONE 3 (Headphone)	Stereo phone jack (1), output level: -20 dBu, impedance: 8 $\Omega$
	LINE OUT	Phono jack (14): (ORG, CH 1 to CH 6) x 2, output level: -10 dBu, impedance:
	AUDIO OUT (To PCS-1600)	Phono jack (1), output level: -10 dBu, impedance: 47 $\Omega$ , load impedance: 10 k $\Omega$ or more
	EXT UNIT OUT	Phono jack (Unbalanced, x2), output level: -10 dBu, impedance: 47 $\Omega$ , load impedance: 10 k $\Omega$ or more
<b>Audio performance:</b>	Frequency response	100 Hz to 10 kHz
	S/N ratio	More than 53 dB
	Distortion	Less than 0.5%
<b>General:</b>	Power requirements	100 to 240 V AC (50/60 Hz)
	Power consumption	110 W
	Dimensions (W x H x D)	16 3/4 x 3 7/8 x 15 3/8 inches (424 x 98 x 389 mm)
	Weight (Approx.)	14 lb 5 oz (6.5 kg)



SX-M10A Control Unit Rear Panel

SX-M10A Control Unit		
<b>Input/output connectors:</b>	DELEGATE'S UNIT	20-pin multi-connector male (2)
	VIDEO CONFERENCE	RS-232C 9-pin D-sub connector male (1)
	EXT CAMERA	RS-232C 9-pin D-sub connector male (1)
<b>Input:</b>	AUDIO IN	Phono jack (1), input level: -10 dBu, impedance: 10 k $\Omega$
	EXT MIC	Phone jack (1), input level: -60 dBu, impedance: 600 $\Omega$
<b>Output:</b>	AUDIO OUT	Phono jack (1), output level: -10 dBu, impedance: 47 $\Omega$ , load impedance: 10 k $\Omega$ or more
	LINE OUT	Phono jack (2), output level: -10 dBu, impedance: 47 $\Omega$ , load impedance: 10 k $\Omega$ or more
<b>Audio performance:</b>	Frequency response	100 Hz to 10 kHz
	S/N ratio	More than 50 dB
	Distortion	Less than 1%
<b>General:</b>	Power requirements	100 to 240 V AC (50/60 Hz)
	Power consumption	65 W
	Dimensions (W x H x D)	17 x 1 15/16 x 11 3/4 (430 x 48 x 295 mm)
	Weight (Approx.)	7 lb 8 oz (3.4 kg)
<b>Supplied Accessories:</b>	Operating instructions (1)	
	Warranty card (1)	
	Audio cable (1) for PCS-1600	
	Signal adaptor (1) for PCS-1600	
	Ferrite core (1)	
	Bracket (2)	
	Screw (8)	
AC power cord (1)		

# Specifications



**SX-E120A Expansion Unit Rear Panel**

<b>SX-E120A Expansion Unit</b>		
<b>Input/output connectors:</b>	DELEGATE'S/CHAIRMAN'S UNIT	20-pin multi-connector (4)
	CONTROL UNIT	20-pin multi-connector (1)
<b>Audio performance:</b>	Frequency response	100 Hz to 10 kHz
	S/N ratio	More than 53 dB
	Distortion	Less than 0.5%
<b>General:</b>	Power requirements	100 to 240 V AC (50/60 Hz)
	Power consumption	92 W
	Dimensions (W xH x D)	16 3/4 x 3 7/8 x 15 3/8 inches (424 x 98 x 389 mm)
	Weight (Approx.)	12 lb 13 oz (5.8 kg)

<b>SX-P700 Interpreter's Unit</b>		
<b>Input/output connectors:</b>	CONTROL UNIT/INTERPRETER'S UNIT	20-pin multi-connector (2)
<b>Input:</b>	MIC IN	XLR 3-pin (2), -60 dBu/-70 dBu, selectable, balanced
<b>Output:</b>	LINE OUT	Phono jack (1), -10 dBu for speaker, unbalanced
	MAIN/SUB	Stereo phone Jack (4), -26 dBu/8 Ω (With the maximum output level), -16 dBu/8 Ω (With the maximum volume setting)
<b>General:</b>	Power consumption:	40 mA
	Dimensions (W xH x D)	13 3/4 x 3 1/8 x 8 1/4 inches (346.5 x 78.3 x 207.5 mm)
	Weight:	3 lb 4 oz (1.5 kg)

<b>SX-C700A/SX-D700A/SX-C100A/SX-D100A Chairman's Unit/Delegate's Unit</b>		
<b>Microphone type:</b>	Uni-directional electret condenser microphone	
<b>Input/output connectors:</b>	20-pin round (with cable) female connector (1)	
	20-pin round male connector (1)	
<b>Output:</b>	Earphone output	Mini jack (2), -9 dBu/33 Ω
	Recording output	Mini jack (1), -16 dBu/47 kΩ
	Speaker output	10 mW 32 Ω
<b>General:</b>	Power requirements	DC +24 V
	Power consumption	45 mA
	Dimensions (W xH x D)	6 3/4 x 15 7/8 x 6 inches (134 x 401 x 152 mm)
	Weight (Approx.)	1 lb 9 oz (0.7 kg)

<b>SX-C750/SX-D750 Chairman's Unit/Delegate's Unit</b>		
<b>Microphone type:</b>	Uni-directional electret condenser microphone	
<b>Input/output connectors:</b>	15-pin D-sub female connector (1)	
	15-pin D-sub male connector (1)	
<b>Output:</b>	Earphone output	Mini jack (2), -9 dBu/33 Ω
	Recording output	Mini jack (1), -16 dBu/47 kΩ
	Speaker output	10 mW 32 Ω
<b>General:</b>	Power requirements	DC +24 V
	Power consumption	45 mA
	Dimensions (W xH x D)	9 3/4 x 16 3/8 x 4 inches (245 x 413 x 100 mm)
	Weight (Approx.)	1 lb 7 oz (0.65 kg)

**SONY**

Sony Electronics Inc.  
One Sony Drive  
Park Ridge, NJ 07656-8003  
www.sony.com/videoconference

©2002 Sony Electronics Inc. All rights reserved.  
Reproduction in whole or in part without written permission is prohibited.  
Features and specifications are subject to change without notice.  
Sony is a trademark of Sony.  
Microsoft and Windows are registered trademarks of Microsoft Corporation.