

CS2100 • Conference and voting system

The **CS2100** conference system enables automatic management of up to a maximum of 100 stations. All the activities can be managed through a CL2100-G control unit. The available conference modes through which to manage the system are the 'OPEN', 'MANUAL' and 'AUTOMATIC' modes. Participants wishing to speak can queue to do so at any time during the discussion. In the MANUAL and AUTOMATIC modes, speaking is enabled by the operator (in the manual mode) or on the basis of a pre-set timeout (automatic). Delegate stations are

enabled to speak in the order in which they are queued by the central unit. At OPEN conferences, all the stations can speak at the same time. The Chairperson can join a conversation among Delegates or, if necessary, activate the 'Priority' function, placing all the other stations on hold. The heart of the system is the CS2100 power supply unit, with easy cascade connection of the various units by means of 6 lines of CAT5 shielded cable.



CS2100 Central control unit

The **CS2100** unit has a sophisticated digital controller and is able to manage the sequence of the contributions, electronic voting and the various different alphanumeric displays in the conference hall. At least one CL2100-G console is required for configuring the system and the various control activities (the system can include a maximum of four of these units).

The central control unit is able to power up to 100 stations, and has six RJ45 outputs for the various different cascade connections to the microphone stations, consoles and displays (CAT5e SF/UTP cable). It has two audio inputs ('MIC' and 'AUX IN') for connecting additional sources to the conference, such as wired microphones, wireless microphone receivers or other sources of sound (there is a 12 V phantom power supply for the 'MIC' input).

There are double 'IN' and 'OUT' sockets for connection to a recorder with which to record and play back the discussion. On the front panel there are three separate volume controls (signals from the units, from the 'TAPE' input and from the 'MIC/AUX IN' inputs). The 'BOOSTER OUT' (XLR) output can be used for connecting a power unit for sound broadcasting in the hall.

SYSTEM FUNCTIONAL FEATURES

- Maximum overall number of stations that can be connected: 100
- Up to 98 Delegate Units: B2100-DG for voting, B2080-DG with no voting function and B2080-DG for a secretary (Secretary mode)
- Up to 2 B2100-PG Chairperson stations
- Management of the conference mode: Automatic (timeout-based management), Manual (managed by an operator) or Open (simultaneous management of a plurality of stations)
- Up to a total of 4 control console units (CL2100-G) for system management
- Management of electronic open voting or secret ballots
- Direct enabling of Delegate stations via the control console
- The Chairperson can speak either in the 'conversation' mode or in the 'priority' mode
- Easy cascade connections using CAT5 shielded cable
- Up to 6 connecting lines (max 20 units per line, maximum length of lines from the central unit to the last unit connected: 100 m)
- Up to a maximum of 4 CT 2001 conference hall displays
- RS232 serial connector for connecting a PC (to the central unit or to the station line using a CSIF2100 interface)
- Connection of additional sources such as wired microphones, wireless microphone receivers or other sources of sound
- It is possible to connect a recorder for recording and playing back the discussions
- Connection to a power unit for sound broadcasting in the conference hall





CS2080 • Open conference system

The **CS2080** conference system is simple to install, its cost is reasonable and it does not require any programming or any assistance in the conference hall in order to work.

It is a discussion system featuring free access, in which the Chairperson or Moderator's microphone has priority. It is suitable for conferences attended by up to 80 people, including the Chairperson.



CS2080 Central control unit

The heart of the system is the CS2080 control and power supply unit. It has been designed specifically for managing small discussion-only systems with no need for an operator in the conference hall. Versatility of the output connections and the independent front-panel level controls for each audio signal input are the strong points of this control unit. It can power up to 80 stations and has at disposal four RJ45 outputs for connecting the stations in cascade fashion (using CAT5e SF/UTP cable). There is a 'MIC'/'AUX IN' input for connecting additional sources to the conference system such as wired microphones, wireless microphone receivers or other sources of sound. It is possible to provide a 12 V phantom power supply for the 'MIC' input. There are double 'IN' and 'OUT' sockets for connecting a recorder. There is a 'BOOSTER OUT' (XLR) output socket to which a power unit can be connected for sound-broadcasting in the conference hall.

SYSTEM FUNCTIONAL FEATURES

- Maximum overall number of stations that can be connected: 80
- Up to 79 B2080-DG Delegate Stations
- One B2080-PG Chairperson station
- Open conference mode only (simultaneous management of a plurality of stations)
- The Chairperson can speak either in the 'conversation' mode or in the 'priority' mode
- Easy cascade connections using CAT5 shielded cable
- Up to 4 connecting lines (max 20 units per line, maximum length of lines from the central unit to the last unit connected: 100 m)
- Connection of additional sources and of an audio recorder
- Three separate volume controls (signals from the units, from the 'TAPE' input and from the 'MIC/AUX IN' inputs)
- Connection to a power unit for sound broadcasting in the conference hall



MODEL	CS2100	CS2080	
Conference mode	Conference and voting	Only open conference	
Maximum overall number of units	2 Chairman units + 98 Delegate units	1 Chairman units + 79 Delegate units	
Control console unit	CL2100-G (min 1, max 4)	-	
Microphone unit connection lines	6 RJ45	4 RJ45	
Microphone unit connecting cables	CV20xx cables with RJ45 connectors or 31/142-100 (CAT5e SF/UTP shielded cable, 100 m roll)		
Audio inputs	3		
	MIC IN	TAPE IN	AUX IN
Type	Balanced XLR	Unbalanced, 2 RCA	
Sensitivity	1,5 mV	220 mV	125 mV
S/N ratio	65 dB	> 70 dB	
Frequency response	170 ÷ 13.000 Hz	50 ÷ 20.000 Hz	
Audio outputs	2		
	'BOOSTER OUT'	Balanced XLR, 420 mV	
'TAPE OUT'	2 RCA, 210 mV		
Serial data output	RS232, DB9	-	
Mains power supply	230 Vac - 50/60 Hz (140 W)		
Dimensions (W x H x D)	482 x 44 x 240 mm (direct standard 19" rack mounting, 1 U)		
Weight	5 kg		

Conference and voting units

B2100-DG Delegate unit with voting

B2100-DG stations enable delegates both to take part in the discussion and to express their votes. With three possible choices: 'Yes', 'Abstained' or 'No'. Discretion during the voting is ensured by a cover protecting the three voting keys. Special signalling lamps indicate the following statuses: queued to speak, enabled to speak, timeout and voting accomplished. Each unit is supplied with its own cardioid electret microphone mounted on a 43-cm long flexible stem and a ring that lights up to indicate that it has been activated. Each station also has a push-button for requesting to speak, a built-in loudspeaker that is automatically excluded when the station is active and a volume control. Delegates can also listen to the discussion via headphones or earpieces to be connected to the sockets provided for this purpose (3.5 mm jack). As soon as a jack is connected, the built-in loudspeaker is muted. A double RJ45 socket (IN/OUT) on the rear panel enables cascade connection to the other stations or to the control unit, using CAT5e SF/UTP shielded cable.

**B2100-PG** Chairman unit with voting

Each **B2100-PG** unit has the same features described above for B2100-DG delegate stations, plus the possibility, using the double key, to join in a conversation or to activate the Priority function. The Priority control excludes off all the other microphones. Like the Delegate Stations, the Chairman's station also enables voting, with a choice between three possibilities: 'Yes', 'Abstained' or 'No'. Each unit is supplied with its own cardioid electret microphone mounted on a 43-cm long flexible stem and a ring that lights up to indicate that it has been activated. Each unit also has a push-button for requesting to speak, a built-in loudspeaker that is automatically excluded when the station is active and a volume control. The chairperson can also listen to the discussion via a headphone or an earpiece to be connected to the socket provided for this purpose (3.5 mm jack). As soon as the jack is connected, the built-in loudspeaker is muted. A double RJ45 socket (IN/OUT) on the rear panel enables cascade connection to the other stations or to the control unit, using CAT5e SF/UTP shielded cable.

**CL2100-G** Control console unit

The CS2100 control unit for configuring the system and performing the various control activities requires at least one **CL2100-G** console (up to a maximum of four can be installed). This unit enables programming and complete management of the discussion, of voting and, if required, activation of a speaker's station (B2100-DG and/or B2080-DG) without queuing. The backlit LCD display shows the statuses of the microphones (ID number of the currently active microphone, of the next one in the queue and number of speakers queued to speak) and the result of the voting (total number of people voting Yes, number voting No and number Abstaining). There is a double RJ45 socket (IN/OUT) for direct connection to the control unit or for cascade connection to the other stations. The console has all the controls needed for easy and immediate use (numerical 0-9 keypad, key for selecting the conference mode, key for starting/ending the voting, key for continuing the discussion, menu key for selecting the language, selecting the length of the contributions in the automatic mode and selecting the service functions).





Only open conference units

B2080-DG Delegate unit for open conference

Each **B2080-DG** station enables the delegate to take an active part in the discussion and to listen clearly to the contributions of the other speakers via the built-in loudspeaker or via an external headphone. Each unit is supplied with its own cardioid electret microphone mounted on a 43-cm long flexible stem and a ring that lights up to indicate that it has been activated. Each station also has a push-button for requesting to speak, a built-in loudspeaker that is automatically excluded when the station is active and a volume control. Delegates can also listen to the discussion via headphones or earpieces to be connected to the sockets provided for this purpose (3.5 mm jack). As soon as a jack is connected, the built-in loudspeaker is muted. A double RJ45 socket (IN/OUT) on the rear panel enables cascade connection to the other stations or to the control unit, using CAT5e SF/UTP shielded cable.

NB.: a B2080-DG microphone station can be used with the CS2100 system to act as “non-voting” delegate or, if suitably configured, as a Secretary, with the possibility of stepping in directly without having to queue to speak.



B2080-PG Chairman unit for open conference

Each **B2080-PG** unit has the same features described above for B2080-DG delegate stations, plus the possibility, using the double key, to join in a conversation or to activate the Priority function. The Priority control excludes off all the other microphones.

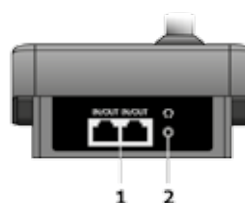
Each unit is supplied with its own cardioid electret microphone mounted on a 43-cm long flexible stem and a ring that lights up to indicate that it has been activated. Each unit also has a push-button for requesting to speak, a built-in loudspeaker that is automatically excluded when the station is active and a volume control. The chairperson can also listen to the discussion via a headphone or an earpiece to be connected to the socket provided for this purpose (3.5 mm jack). As soon as the jack is connected, the built-in loudspeaker is muted. A double RJ45 socket (IN/OUT) on the rear panel enables cascade connection to the other stations or to the control unit, using CAT5e SF/UTP shielded cable.



ACCESSORIES

AC700 Fixing mounting kit for B2080, B2100 and CL2100-G units

B2080 - B2100



1. Input/output connectors
2. Socket for headset

MODEL	CL2100-G	B2100-DG	B2100-PG	B2080-DG	B2080-PG
Conference mode	Conference and voting			Only open conference	
Unit type	Control console unit	Delegate unit	Chairman unit	Delegate unit	Chairman unit
Suitable central control unit	CS2100			CS2100, CS2080	CS2080
Microphone	-	43-cm long stem flexible at the base, electret microphone			
Digital display	16 digits x 2 lines	-			
Headset output	-	Stereo jack type outlet (3,5 mm)			
Connecting plugs	2 x RJ45				
System connecting cables	CV20xx cables with RJ45 connectors (not included) or 31/142-100 (CAT5e SF/UTP shielded cable, 100 m roll)				
Mounting	Desktop (AC700 fixing mounting optional kit)				
Dimensions (W x H x D)	116 x 32 ÷ 60 x 200 mm	116 x 32 ÷ 60 (490 with microphone) x 200 mm			
Colour	Light grey				
Weight	0,5 kg				0,6 kg

System accessories

CT2001 Conference-hall display panel



The conference-hall display shows the delegates and the public the main information concerning the conference being held. At the end of a voting session, it indicates the total number of people voting Yes, number voting No and number Abstaining. During the discussion (except in the case of 'OPEN' conferences), it shows the ID number of the microphone of the speaker that is currently enabled to speak, that of the next speaker in the queue and the total number of speakers queued to speak. The **CT2001** is an alphanumeric display with fixed fields and showing interchangeable texts. It has two RJ45 (IN/OUT) sockets for direct connection to the control unit or cascade connection to the other stations (using shielded CAT5e SF/UTP cable). With the CS2100 system it is possible to install up to four CT2001 units.

MODEL	CT2001
Panel type	3 fixed fields, 2 ½ digits each field
Lamps	Red LEDs
Suitable central control unit	CS2100
Connecting plugs	2 RJ45
System connecting cables	CV20xx cables with RJ45 connectors or 31/142-100 (CAT5e SF/UTP shielded cable, 100 m roll)
Mains power supply	230 Vac - 50/60 Hz
Dimensions (W x H x D)	1050 x 500 x 40 mm
Mounting	Wall mounting (accessories non included)
Weight	20 kg

CSIF2100 Remote interface to connect a PC

The **CSIF2100** interface can be used to connect a Personal Computer loaded with the control software at any point of the network connecting the microphone stations of the CS2100 system. It has a double RJ45 (IN/OUT) socket for direct connection to the control unit or cascade connection to the other stations (using shielded CAT5e SF/UTP cable). There is a DB9 socket enabling an RS232 serial link to the personal computer. All the electronics are contained in a small metal box screwed to the unit. The circuit board is powered directly from the network connecting the system to the control unit.

MODEL	CSIF2100
Suitable central control unit	CS2100
Connecting plugs	2 RJ45
System connecting cables	CV20xx cables with RJ45 connectors or 31/142-100 (CAT5e SF/UTP shielded cable, 100 m roll)
Serial data output	RS232, DB9
Mounting	Metal housing with screw fixing
Dimensions (W x H x D)	136 x 26,5 x 95 mm
Weight	400 g

CONNECTING CABLES

The connecting cables are not included in the supply of the stations and must be purchased separately, choosing from among the various available lengths: codes **CV2002** (length 2 m), **CV2005** (length 5 m) and **CV2010** (length 10m). It is possible to make connections of lengths other than these using only **31/142-100** type cable, available in 100-m bundles. All the connectors must be RJ45 connectors of the shielded type and the connecting cables must be CAT5e SF/UTP cables.

CV2002 CAT5e SF/UTP shielded cable, 2 m, RJ45 connectors

CV2005 CAT5e SF/UTP shielded cable, 5 m, RJ45 connectors

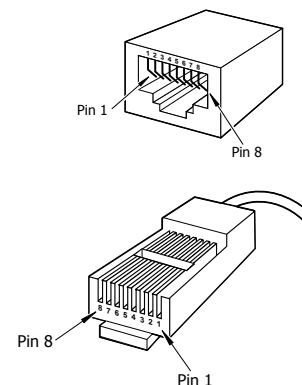
CV2010 CAT5e SF/UTP shielded cable, 10 m, RJ45 connectors

31/142-100 CAT5e SF/UTP shielded cable, 100 m roll

CS2000 SYSTEM CONNECTIONS

Unit input (RJ45)

Pin	Description
1	Audio +
2	Audio -
3	GND
4	AP line -
5	AP line +
6	+ Vdc
7	Serial line +
8	Serial line -
Shield	GND



All the connectors must be shielded RJ45 type



System summary table

CENTRAL CONTROL UNIT SYSTEM	CS2080	CS2100
Conference mode	Only open conference	Manual, Automatic, Open and Voting
Chairman units	1	2
Delegate units	79	98
Chairman unit for open conference	B2080-PG	-
Delegate unit for open conference	B2080-DG	
Chairman unit with voting	-	B2100-PG
Delegate unit with voting	-	B2100-DG
Control console unit	-	CL2100-G (min 1, max 4 units)
Management by Personal Computer and dedicated SW	-	RS232 serial line connection with shielded cable
Microphone unit connection lines	4 RJ45	6 RJ45
Maximum overall number of unit for each line	max 20 units per line (max line length from the central unit to the last unit connected: 100 m)	
Audio outputs	2 line outputs (for sound broadcasting in the conference hall and for audio recording)	
Audio inputs	1 microphone input and 2 line inputs (tape and aux)	
ACCESSORIES	CS2080	CS2100
Conference-hall display panel	-	CT2001 (max 4)
Fixing mounting kit for microphone units	AC700	
Remote interface to connect a PC with dedicated SW	-	CSIF2100, to connect a Personal Computer at the network of the microphone units of the system
Cables with RJ45 connectors	CV2002 (2 m), CV2005 (5 m), CV2010 (10 m)	
100 m roll cable	31/142-100, CAT5e SF/UTP shielded cable, 100 m roll	



EASY CAT5 CONNECTION

One of the strong points of the PASO CS2000 system is the extreme simplicity with which it is installed and connected up. A single cable distributes power, data and the audio signal. Each station has a double RJ45 socket (IN-OUT) on the rear panel to enable easy cascade connection using **CAT5** shielded cables. There are no constraints of any kind in terms of the physical positions of the stations within the systems. The Delegate and Chairpersons Stations, the conference hall display and the interface for connecting a remote PC can be positioned anywhere in the network connecting them to the central control unit.

