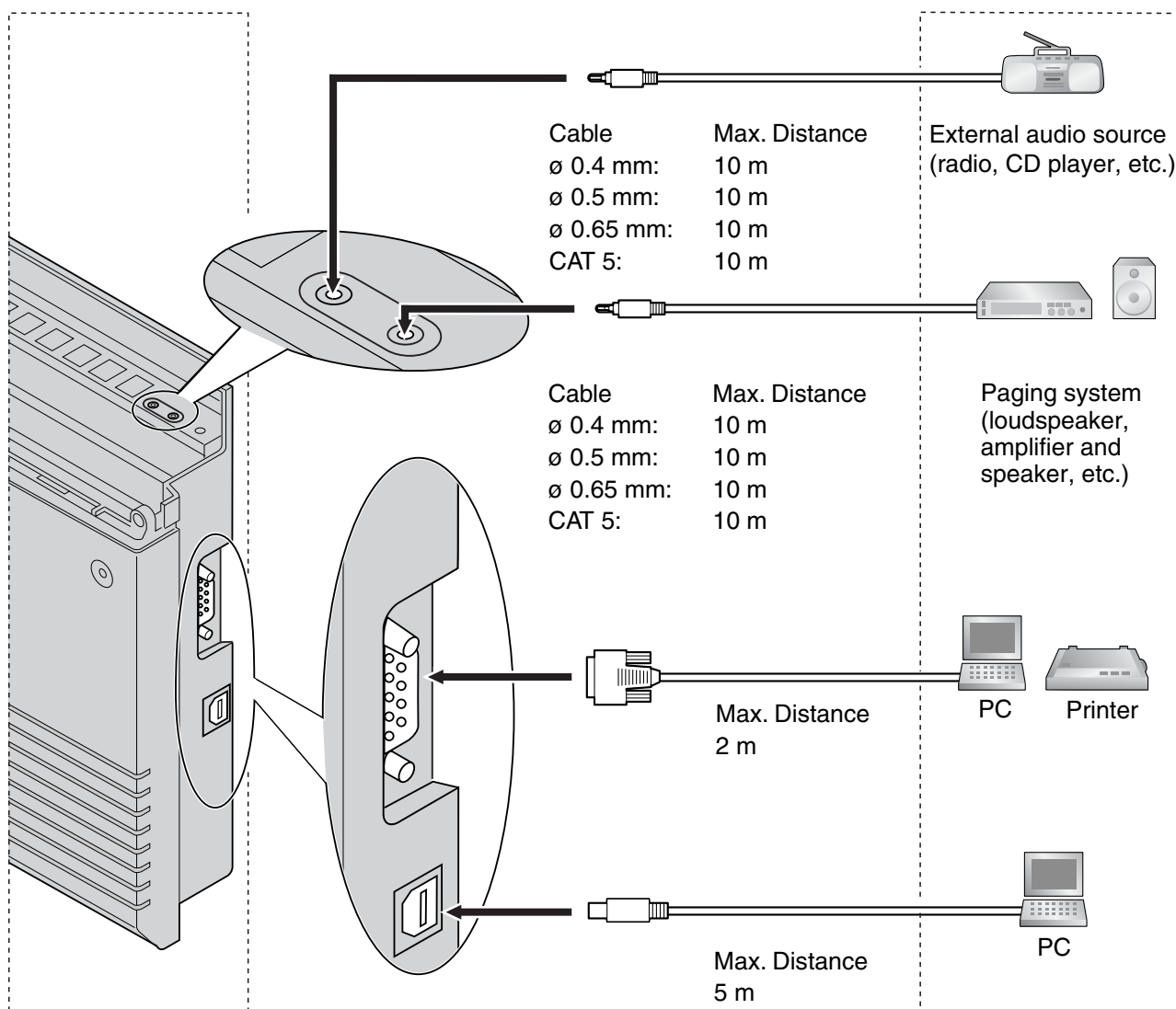


2.8 Connecting Peripherals

2.8.1 Connecting Peripherals



Note

Be sure to comply with the above maximum distance between the PBX and each peripheral.

BGM/MOH

1 audio source (user-supplied), such as a radio or CD player, can be connected to the PBX and used as the source of Background Music (BGM) and Music on Hold (MOH).

Connect a cable from the audio output (earphone jack, headphone jack, etc.) of the audio source to

the MOH Jack of the PBX.

Use an EIAJ RC-6701 A plug (2-conductor, 3.5 mm in diameter).

- Input impedance: 8 Ω

CAUTION

- Do not force audio cables into the jacks. Doing so may damage the connections and cause the audio to cut in and out.
- The MOH port is an SELV port and should only be connected to an approved SELV device, or in Australia, via the Line Isolation Unit with the Telecommunications Compliance Label.

Notes

- Use the supplied audio source connector in the event that the user-supplied audio cable connector is too long and does not fit when the top front cover of the PBX is closed. Remove the connector from the user-supplied audio cable, expose the bare cable, and attach the supplied audio source connector.
- When the PBX and external audio source are not connected to the same earth, a humming noise may be heard in the BGM and MOH.
- The audio source used for BGM and MOH is determined by system programming.
- To adjust the sound level of the MOH, use the volume control on the external audio source.

Pager

Only 1 paging device (user-supplied) can be connected to the PBX.

Use an EIAJ RC-6701 A plug (2-conductor, 3.5 mm in diameter).

- Output impedance: 600 Ω

CAUTION

The External Paging Jack is an SELV port and should only be connected to an approved SELV device, or in Australia, via the Line Isolation Unit with the Telecommunications Compliance Label.

Notes

- Use the supplied pager connector in the event that the user-supplied pager cable connector is too long and does not fit when the top front cover of the PBX is closed. Remove the connector from the user-supplied pager cable, expose the bare cable, and attach the supplied pager connector.
- To adjust the sound level of the pager, use the volume control on the loudspeaker or amplifier.

PC/Printer (via RS-232C)

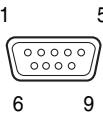
A PC can be connected via the RS-232C interface and used to log and display call records, and programme the PBX. A printer can also be connected, to print call records.

Connect the PC or printer via an RS-232C cable (user-supplied).

Note

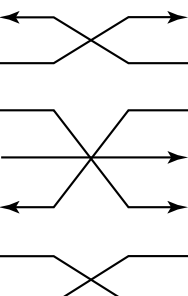
Use an RS-232C cross cable when connecting the PBX with a PC.

Pin Assignments

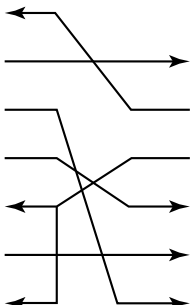
	No.	Signal Name	Function	Circuit Type	
				EIA	CCITT
	2	RD (RXD)	Receive Data	BB	104
	3	SD (TXD)	Transmit Data	BA	103
	4	ER (DTR)	Data Terminal Ready	CD	108.2
	5	SG	Signal Ground	AB	102
	6	DR (DSR)	Data Set Ready	CC	107
	7	RS (RTS)	Request To Send	CA	105
	8	CS (CTS)	Clear To Send	CB	106

Connection Charts

For connecting a PC/printer with a 9-pin RS-232C connector

PBX			PC/Printer			
Circuit Type (EIA)	Signal Name	Pin No.		Pin No.	Signal Name	Circuit Type (EIA)
BB	RD (RXD)	2		2	RD (RXD)	BB
BA	SD (TXD)	3		3	SD (TXD)	BA
CD	ER (DTR)	4		4	ER (DTR)	CD
AB	SG	5		5	SG	AB
CC	DR (DSR)	6		6	DR (DSR)	CC
CA	RS (RTS)	7		7	RS (RTS)	CA
CB	CS (CTS)	8		8	CS (CTS)	CB

For connecting a PC/printer with a 25-pin RS-232C connector

PBX			PC/Printer			
Circuit Type (EIA)	Signal Name	Pin No.		Pin No.	Signal Name	Circuit Type (EIA)
BB	RD (RXD)	2		1	FG	AA
BA	SD (TXD)	3		3	RD (RXD)	BB
CD	ER (DTR)	4		2	SD (TXD)	BA
AB	SG	5		20	ER (DTR)	CD
CC	DR (DSR)	6		7	SG	AB
CA	RS (RTS)	7		5	CS (CTS)	CB
CB	CS (CTS)	8		6	DR (DSR)	CC
				8	CD (DCD)	CF

RS-232C Signals

- **Receive Data (RXD):...**(input)
Carries signals from the printer or the PC to the PBX.
- **Transmit Data (TXD):...**(output)
Carries signals from the PBX to the printer or the PC. Stays in "Mark" status unless data or BREAK signals are being transmitted.
- **Data Terminal Ready (DTR):...**(output)
This signal line is turned ON by the PBX to indicate that it is ON LINE. Circuit ER (DTR) ON does not indicate that communication has been established with the printer or the PC. It is switched OFF when the PBX is OFF LINE.
- **Signal Ground (SG)**
Connects to the DC ground of the PBX for all interface signals.
- **Data Set Ready (DSR):...**(input)
An ON condition of circuit DR (DSR) indicates that the printer or the PC is ready. Circuit DR (DSR) ON does not indicate that communication has been established with the printer or the PC.
- **Request To Send (RTS):...**(output)
This is held ON whenever DR (DSR) is ON.
- **Clear To Send (CTS):...**(input)
An ON condition of circuit CS (CTS) indicates that the printer or the PC is ready to receive data from the PBX. The PBX does not attempt to transfer data or receive data when circuit CS (CTS) is OFF.
- **Frame Ground (FG)**
Connects to the unit frame and the earth ground conductor of the AC cord.
- **Data Carrier Detect (DCD):...**(input)
An ON condition of circuit CD (DCD) indicates the data terminal (DTE) that the carrier signal is being received by.

PC (via USB 1.1 interface)

A PC running the KX-TE Maintenance Console software can be connected via the USB interface and used to programme the system and upload/download data to the PBX.

Pin Assignments

	No.	Signal Name
	1	VBUS
	2	USB D-
	3	USB D+
	4	GND