

AUDIOACCESS[®]

CPC-800

RS-485 TO RS-232 CONTROL PROTOCOL CONVERTER OPERATIONS MANUAL



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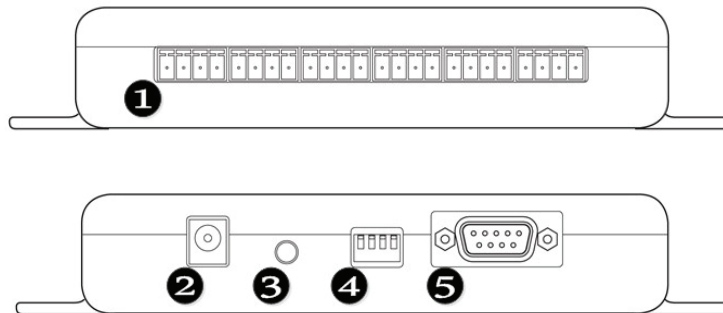
CPC-800 Operations Manual

The CPC-800 takes in RS-485 communications from legacy KPS-101 keypads and converts the control commands into RS-232 commands for the new Audioaccess® PX-800 Multi-room Audio Controller.

Carton Contents:

CPC-800 RS-485 to RS-232 Control Protocol Converter
+12V / 1A power supply
6 “Phoenix” style 4 pin screw terminal connectors
Operations Manual

Physical Connections and Settings



- 1 . 4-Pin Connectors** (QTY. 6) - RS-485 KPS-101 Keypad Connections with screw terminals. Signal connections are as follows (Left to Right);
 - a. Pin 1** - +12V Power (*Red*)
 - b. Pin 2** - (+) DATA (*Green*)
 - c. Pin 3** - (-) DATA (*Yellow*)
 - d. Pin 4** - Ground (*Black*)

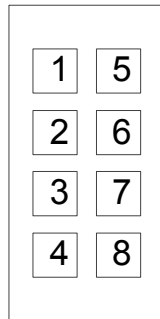
- 2 . Power** - Connect the center positive +12V power supply here. If you need to replace the power supply, a supply capable of at least a 0.5 A would be recommended. The power requirements will vary due to the number of keypads connected, each draws 55 mA for a maximum draw of 330mA for all 6 keypads. The CPC-800 itself draws approximately 18 mA during normal operation.

- 3 . LED** - Flashes at 1 Hz as a heartbeat indicator when power is applied.

4. **Features Switch** – Four section dip switch for additional features of the CPC-800. Switch 1 controls the RS-485 termination of the CPC-800 and is set on by default (switch down). The other switches are non-functional and are reserved for future use.
5. **DB-9** – RS-232 connection to either the Audioaccess® PX-800 Multi-room Audio Controller RS-232 port or to a 3rd party control system, (Crestron, RTI, etc.). A null modem connection may be required depending on the 3rd party.

Keypad Operation

1. KPS-101 button presses are defined in the list below. Buttons 1-4 & 8 are source selection buttons. Using a press & release or a press & hold action for the source selection buttons controls selection of first 10 sources on the PX-800. Button 5 functions as a mute toggle button. Buttons 6 & 7 are standard volume controls.



KPS-101 Keypad Button Layout

- a. **Button 1 “FM”** - press and release to switch the zone to input 1.
- b. **Button 1 “FM”** - press and hold to switch the zone to input 6. LED remains illuminated
- c. **Button 2 “CD”** - press and release to switch the zone to input 2.
- d. **Button 2 “CD”**- press and hold to switch the zone to input 7. LED remains illuminated
- e. **Button 3 “Tape”** - press and release to switch the zone to input 3.
- f. **Button 3 “Tape”** - press and hold to switch the zone to input 8. LED remains illuminated
- g. **Button 4 “AUX”** - press and release to switch the zone to input 4.
- h. **Button 4 “AUX”** - press and hold to switch the zone to input 9. LED remains illuminated
- i. **Button 8 “VID”** - press and release to switch the zone to input 5.

- j. **Button 8 “VID”** - press and hold to switch the zone to input 10.
LED remains illuminated
- k. **Button 5 “On”** - press and release to toggle muting in the zone.
- l. **Button 6 “Up Arrow”** - press or press and hold to ramp up the volume in the zone.
- m. **Button 7 “Down Arrow”** - press or press and hold to ramp the volume down in the zone.

KPS-101 Setup for use with CPC-800 & PX-800



KPS-101 DIP Switches – On/Up, Off/Down – Example: Zone 6, System 1, IR ‘Off’, Termination ‘On’

- a. **Room Codes** – Switches 1-4 - Sets the PX-800 zone output that is controlled by the KPS-101 keypad.

PX-800 Zone	Room Code Setting (1,2,3,4) – 1 On, 0 Off
1	0000
2	1000
3	0100
4	1100
5	0010
6	<i>1010 (shown in picture)</i>
7	0110
8	1110
9	0001
10	1001
11	0101
12	1101
13	0011
14	1011
15	0111
16	1111

- b. **System Code** – Switches 5-8 - Set switch 5 on, and 6-8 off. This sets the keypad to system 1. This is a safe setting; other system settings work as well, except for system setting 0. Set all KPS-101s to the same system code.
- c. **IR Receiver** – Switch 9 - This switch should be set to off. This switch operates in reverse from the other switches; down is on & up is off. The IR receiver of the KPS-101 and therefore IR pass-thru to control source components is not supported with the CPC-800. A 3rd party remote extender will be required for IR remote functionality.
- d. **Terminator** – Switch 10 - Changes the termination level of the KPS-101 RS-485 connection; approx. 180 kOhms off, 1k Ohms on. This should not need to be changed from the setting used with the PX-700; however, if communication problems arise, this setting may need to be changed for best operation.

Installation Notes

PX-800 Zone Output	Room	PX-800 Source Input	Source
1		1	
2		2	
3		3	
4		4	
5		5	
6		6	
7		7	
8		8	
9		9	
10		10	
11		11	
12		12	
13		13	
14		14	
15		15	
16		16	

ATI Limited Warranty

Terms and Conditions

All ATI products are warranted against defects in materials and workmanship for 90 days from the date of purchase by the original owner. The date of purchase shall be established by the original owner presenting to the ATI Customer Service Facility the original owner's purchase receipt or sales slip showing from whom the product was purchased, the date of purchase and the purchase price of the unit.

In the event that proof of purchase cannot be established as stated in the preceding sentence, the warranty period shall commence on the date of manufacture, provided the serial number on the unit has not been altered in any manner.

During the warranty period, ATI will repair, or at its option, replace at no charge, components that prove to be defective provided the product is returned in accordance with the shipping instructions that are contained in the unit. The unit is to be sent PREPAID in the original carton and packing along with a detailed description of the problem to ATI in the event it needs factory servicing. ATI will return it prepaid to you upon completion of the service.

Optional Extended Warranty Program

The standard 90-Day Limited Warranty will be extended to a 1-Year Limited Warranty for the CPC-800, a 3-Year Limited Warranty (on all A/V Processors) or a 7-Year Limited Warranty (on all Power Amplifiers) if the following conditions are met:

The ATI product is purchased from an authorized ATI reseller. The customer completes the registration card. The customer returns the completed registration card AND copy of original bill of sale to ATI within 14 days of purchase.

This extended warranty is transferable to subsequent purchasers as long as all Optional Extended Warranty conditions are met.

Transferability

The above warranties are transferable to subsequent owners as long as all the conditions are met under the Optional Extended Warranty Program. The warranty is not transferable if the unit(s) was originally purchased from an unauthorized seller.

The above warranties do not apply if the product has been damaged by accident or misuse or as a result of modification by other than the ATI factory service facility.

ATI shall not be held liable for incidental or consequential damages of any kind arising from the sale or use of its products. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

THERE ARE NO WARRANTIES GIVEN BY ATI THAT EXTEND BEYOND THE DESCRIPTION ON THE FACE HEREOF. ALL IMPLIED WARRANTIES OF FITNESS FOR PURPOSE SOLD, MERCHANTABILITY, DESCRIPTION, QUALITY PRODUCTIVENESS OR ANY OTHER MATTERS ARE LIMITED TO THE TERM OF THE EXPRESS WARRANTIES HEREIN STATED.

Some states do not allow limitations on how long an implied warranty may last, so the above limitation may not apply to you.

Obligation to Make Changes

Products are sold on the basis of specifications applicable at the time of sale. ATI shall have no obligation to modify or to update products once sold. This warranty gives you specific rights and you may also have other rights that vary from state to state. This warranty is applicable only in the United States.

Warranty Outside the United States

ATI has formal distribution agreements in many countries. The ATI importer in those countries has assumed the responsibility for servicing ATI products. Please contact the dealer or distributor in the country where you purchased your product for service issues.

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1749 Chapin Rd. Montebello, California 90640

Phone: 323-278-0001 • Fax: 323-278-0083

Website: <http://www.audioaccess.com>

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