

Cary Audio Design

DMC-600 Digital Music Center

RS-232 Protocol and Control Details

Com Port Setup:

Use standard communications settings. The default that most devices use/accept is:

Baud Rate : 9600 bps
Data Bits : 8
Parity : None
Stop Bits : 1 bit
Handshaking : None

Com Port Pin Configuration:

Use standard pin configuration. A configuration that allows direct connection to a PC via 9-pin straight through serial cable is best. Use of only 3 pins (Transmit, Receive, Ground) is best.

9 pin female D connector

Pin 2 = Transmit
Pin 3 = Receive
Pin 5 = Ground

Command Packets :

The Command Packets are provided for the Host Controller request to the DMC-600 to perform a specific action.

Start character : '@'
COMMAND : see Data Packet 'COMMAND List'.
PARAMETERS : see Data Packet 'PARAMETERS List'.
End character (CR) : 0Dh

Start '@'	COMMAND	PARAMETERS	End 0Dh
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Status Feedback Packets:

The DMC-600 will send to the HOST asynchronous status packets when applicable DMC-600 status changes.

Start character : 'R'
Answer character : see Data Packet 'Status Answer List'.
End character (CR) : 0Dh

Start 'R'	Query COMMAND	Query PARAMETERS	End 0Dh
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RS232-Interface Usage Details:

The RS-232 interface has a first-in-first-out (FIFO) buffer which will allow each command to be received in direct succession. Commands are executed in the order in which they are received with approximately a 1/2 second delay between each command. If a longer string of commands is necessary, a minimum of 1/2 second delay should be added before sending additional commands.

DMC-600 will send a NAK Response packet if the DMC-600 has received an incorrect HOST command packet.

Start character : '@' NAK : ERR End character (CR) : 0Dh

Start '@'	NAK	End 0Dh
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Specific Commands

Command	Parameters	Description
POWE	x	Set Power on/off where x = 0,1 (off, on)
Auto status Answer Command will send when status changes: POWEx		
SOUR	x	Set Source input selection where x = 0,1,2,3...6 (0=CD, 1=OPTICAL, 2=COAXIAL 1, 3=COAXIAL 2, 4=AES/EBU, 5=BLUETOOTH, 6=PC-USB)
Auto status Answer Command will send when status changes: SOURx		
MUTE	x	Set Mute/un-mute the output where x = 0,1 (un-mutes, mutes)
Auto status Answer Command will send when status changes: MUTEx		
VOLU		Set increase volume (similar to vol up on remote)
Auto status Answer Command will send when status changes: VOLU		
VOLD		Set decrease volume (similar to vol down on remote)
Auto status Answer Command will send when status changes: VOLD		
TUBE	x	Set Tube output selection where x = 0,1 (0=solid state mode 1=tube output mode)
Auto status Answer Command will send when status changes: TUBEx		
SRC	x	Set SRC selection where x = 0,1, (0=no change, 1=next step)
Auto status Answer Command will send when status changes: SRCx		
CLOC	x	Set Clock in input on/off where x = 0,1 (off, on)
Auto status Answer Command will send when status changes: CLOCx		
BRIG	x	Set front panel display intensity where x = 0,1,2,3 (0=off, 1=low 2=med 3=hi)
Auto status Answer Command will send when status changes: BRIGx		

CD Player Commands

Command	Parameters	Description
OPCL		CD tray OPEN or CLOSE
Auto status Answer Command will send when status changes: OPCL		
PLAY		Start play the Disc
Auto status Answer Command will send when status changes: PLAY		
STOP		Stop play the Disc
Auto status Answer Command will send when status changes: STOP		
PAUS		Interrupt play and resume play

Auto status Answer Command will send when status changes: PAUS

PREV Jump to the start of the previous track

Auto status Answer Command will send when status changes: PREV

NEXT Select another track during play

Auto status Answer Command will send when status changes: NEXT

NUMB x Use the number to select the desired track. Playback starts from the selected track
where x = 0,1..9 (0=0, 1=1, 2=2, 3=3, 4=4, 5=5, 6=6, 7=7, 8=8, 9=9)

Auto status Answer Command will send when status changes: NUMBx

REPE x Repeat play when playing
where x = 0,1, 2 (0=time to clear, 1=single track, 2=time to repeat ALL)

Auto status Answer Command will send when status changes: REPEx

TIME Display the remaining time of a track or total time on VFD display

Auto status Answer Command will send when status changes: CD 0:00:00