



## Rotel CD11 / CD14 RS232 ASCII Controller Command List

Date	Version	Update Description
August 26, 2016	1.00	Original Specification
December 18, 2018	1.10	Add CD11

The CD11 and CD14 support an ASCII based RS232 protocol. The RS232 hardware does not support flow control so care needs to be take when sending and receiving data to avoid packet loss.

All commands sent to the attached Rotel device must have a terminating “!” character.

**Example Command:** power\_on!

**Note:** Do not include any spaces in the command, and do not include a carriage return or line feed after the command, only the “!” terminating character.

Status information from the attached Rotel product will have a terminating “\$” character for fixed length options. Variable-length strings (i.e. CD disc/track metadata) will be terminated with a double character ‘\$\$’ instead. It is up to the sending/receiving control application to properly parse and process the packets.

### Connection Settings

Baud Rate	Parity	Valid Data Bits	Stop Bit Value	Handshaking	Data Type
57600	N	8	1	None	String

### Communication Protocol

Command and response messages are included on the following pages. Automatic status update information can be enabled/disabled using the “rs232\_update\_on” and “rs232\_update\_off” commands.

With RS232 update set to ON, any status changes to the unit will be transmitted via RS232. With RS232 update set to OFF, the unit will not send any feedback unless polled by the controller.

## Section 1: Control Command List

CD11/CD14 ASCII	Command Description	Unit Response
<b>POWER COMMANDS</b>		
power_on!	Power On	power=on\$
power_off!	Power Off	power=standby\$
power_toggle!	Power Toggle	power=on/standby\$
<b>CD TRANSPORT COMMANDS</b>		
play!	Play	status=play\$
stop!	Stop	status=pause/stop\$
pause!	Pause Toggle	status=pause/play\$
trkf!	Track Forward	track=###\$
trkb!	Track Backward	track=###\$
ff!	Fast Forward	n/a
fb!	Fast Backward	n/a
rnd!	Random Play Mode Toggle	rnd=on/off\$
rpt!	Repeat Play Mode Toggle	rpt=track/disc/off\$
<b>NUMERIC KEY COMMANDS</b>		
1!	Number Key 1	n/a
2!	Number Key 2	n/a
3!	Number Key 3	n/a
4!	Number Key 4	n/a
5!	Number Key 5	n/a
6!	Number Key 6	n/a
7!	Number Key 7	n/a
8!	Number Key 8	n/a
9!	Number Key 9	n/a
0!	Number Key 0	n/a
<b>OTHER COMMANDS</b>		
eject!	Eject CD	tray_status=open/close\$
time!	Toggle CD Time Display	n/a
dimmer!	Toggle Display Dimmer	dimmer_#\$
dimmer_0!	Set Display to 0 (Brightest)	dimmer=0\$
dimmer_1!	Set Display to 1	dimmer=1\$
dimmer_2!	Set Display to 2	dimmer=2\$
dimmer_3!	Set Display to 3	dimmer=3\$
dimmer_4!	Set Display to 4	dimmer=4\$
dimmer_5!	Set Display to 5	dimmer=5\$
dimmer_6!	Set Display to 6 (Dimmest)	dimmer=6\$
<b>RS232 FEEDBACK COMMANDS</b>		
rs232_update_on!	Set RS232 Update to Auto (On)	update_mode=auto\$
rs232_update_off!	Set RS232 Update to Manual (Off)	update_mode>manual\$

## Section 2: Feedback Request Command List

<b>Command:</b>	power?
<b>Description:</b>	Request current power status
<b>Return String(s):</b>	power=on\$ / power=standby\$
<b>Return Description:</b>	Current power status
<b>Example:</b>	power=on\$

<b>Command:</b>	status?
<b>Description:</b>	Request CD play status
<b>Return String(s):</b>	status=play\$ / status=stop\$ / status=pause\$
<b>Return Description:</b>	CD Play Status
<b>Example:</b>	status=pause\$

<b>Command:</b>	track?
<b>Description:</b>	Request current CD track number
<b>Return String(s):</b>	track=###\$
<b>Return Description:</b>	Current CD track
<b>Example:</b>	track=002\$

<b>Command:</b>	track_name?
<b>Description:</b>	Request current CD track name
<b>Return String(s):</b>	track_name=text\$\$
<b>Return Description:</b>	Current CD track name. (UTF-8 text encoding)
<b>Example:</b>	track_name=Sample Track Name\$\$

<b>Command:</b>	tray_status?
<b>Description:</b>	Request current CD mechanism status
<b>Return String(s):</b>	tray_status=open\$ / tray_status=close\$ / tray_status=load\$
<b>Return Description:</b>	Current CD tray status
<b>Example:</b>	tray_status=close\$

<b>Command:</b>	rnd?
<b>Description:</b>	Request current random play mode
<b>Return String(s):</b>	rnd=on\$ / rnd=off\$
<b>Return Description:</b>	Random play mode
<b>Example:</b>	rnd=on\$

<b>Command:</b>	rpt?
<b>Description:</b>	Request current repeat play mode
<b>Return String(s):</b>	rpt=track\$ / rpt=disc\$ / rpt=off\$
<b>Return Description:</b>	Repeat play mode
<b>Example:</b>	rpt=track\$

<b>Command:</b>	time?
<b>Description:</b>	Request current CD track time
<b>Return String(s):</b>	time=#:##:##\$\$
<b>Return Description:</b>	Text string of time, depending on which time display mode has been set (track time elapsed or remaining, disc time elapsed or remaining)
<b>Example:</b>	time=0:02:45\$\$ / time=1:10:32\$\$

<b>Command:</b>	disc_name?
<b>Description:</b>	Request current CD name
<b>Return String(s):</b>	disc_name=text\$\$
<b>Return Description:</b>	Current CD name. (UTF-8 text encoding)
<b>Example:</b>	disc_name=Sample CD Name\$\$

<b>Command:</b>	disc_type?
<b>Description:</b>	Request type of loaded CD
<b>Return String(s):</b>	disc_type=None\$\$ / disc_type=CD-DA\$\$ / disc_type=HDCD\$\$ / disc_type=MP3\$\$ / disc_type=WMA\$\$
<b>Return Description:</b>	Disc type
<b>Example:</b>	disc_type=CD-DA\$\$

<b>Command:</b>	dimmer?
<b>Description:</b>	Request current front display dimmer level
<b>Return String(s):</b>	dimmer=0\$ / dimmer=1\$ / dimmer=2\$ / dimmer=3\$ / dimmer=4\$ / dimmer=5\$ / dimmer=6\$
<b>Return Description:</b>	Current front display dimmer level
<b>Example:</b>	dimmer=3\$

<b>Command:</b>	version?
<b>Description:</b>	Request the main CPU software version
<b>Return String:</b>	version=#.##\$
<b>Return Description:</b>	Rotel main CPU software version
<b>Example:</b>	version=1.22\$

<b>Command:</b>	model?
<b>Description:</b>	Request the model number
<b>Return String:</b>	model=text\$
<b>Return Description:</b>	Rotel model number
<b>Example:</b>	model=cd14\$