

Cambridge Audio Azur 851C Serial Control Protocol V1.0



Command Groups

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Control Commands

| Group Number | Group Name | Command Number | Command Description | Command Data | Example |
|--------------|------------------|----------------|------------------------------|--|------------------------------------|
| 1 | Control Commands | 01 | Source Select | 1 - CD, 2 - IP1, 3 - IP2, 4 - USB, 5 - AES | #1,01,2\r - Select Input 1 |
| | | 02 | Input Select Up | No Data | #1,02,\r - Next input up |
| | | 03 | Input Select Down | No Data | #1,03,\r -Next input down |
| | | 04 | Get Input Word Width | No Data | #1,04,\r - Get word width |
| | | 05 | Get Input Sampling Frequency | No Data | #1,05,\r - Get sampling frequency |
| | | 14 | Set Power State | 0 - Standby, 1 - On | #1,14,0\r - Put 850C in standby |
| | | 15 | LCD Brightness | 0 - Off, 1 - Dim, 2 - Bright | #1,15,2\r - Set LCD bright |
| | | 16 | Play | No Data | #1,16,\r - Play |
| | | 17 | Pause | No Data | #1,17,\r - Pause |
| | | 18 | Stop | No Data | #1,18,\r - Stop |
| | | 19 | Track Skip Forward | No Data | #1,19,\r - Track skip forward |
| | | 20 | Track Skip Backward | No Data | #1,20,\r - Track skip backward |
| | | 21 | Search Forward | No Data | #1,21,\r - Search forward |
| | | 22 | Search Backward | No Data | #1,22,\r - Search backward |
| | | 23 | Search Stop | No Data | #1,23,\r - Search stop |
| | | 24 | Track Number | 01 to 99 | #1,24,10\r - Enter track number 10 |
| | | 25 | Open/Close Toggle | No Data | #1,25,\r - Open / close |
| 26 | Random Toggle | No Data | #1,26,\r - Random | | |
| 27 | Remain Toggle | No Data | #1,27,\r - Remain | | |

| | | | | | |
|----------------|------------------------|----|---------------------------|-----------------------------|---|
| 1 cont. | Control Commands cont. | 28 | Repeat Toggle | No Data | #1,28,\r - Repeat |
| | | 34 | Get Tray State | No Data | #1,34,\r - Get Tray State (Open / Close / Tray Error) |
| | | 35 | Get Play/Pause/Stop State | No Data | #1,35,\r - Get Play/Pause/Stop State |
| | | 36 | Get Track Name | No Data | #1,36,\r - Get Track Name |
| | | 37 | Get Track Artist | No Data | #1,37,\r - Get Track Artist |
| | | 38 | Get Album Name | No Data | #1,38,\r - Get Album Name |
| | | 39 | Get Album Artist | No Data | #1,39,\r - Get Album Artist |
| | | 40 | Filter Select | 1 - LIN, 2 - MIN, 3 - STEEP | #1,40,1\r - Set filter to MIN (for current input) |
| | | 41 | Get Filter | No Data | #1,41,\r - Get current filter setting |
| | | 42 | Digital Vol+ | No Data | #1,42,\r - Digital Volume Up |
| | | 43 | Digital Vol- | No Data | #1,43,\r - Digital Volume Down |
| | | 44 | Mute (Digital Vol) | No Data | #1,44,\r - Mute Digital Vol |
| | | 45 | UnMute (Digital Vol) | No Data | #1,45,\r - UnMute Digital Vol |

Setup Commands

| Group Number | Group Name | Command Number | Command Description | Command Data | Example |
|--------------|----------------|----------------|---------------------------|--|--|
| 2 | Setup Commands | 01 | Get Main Software Version | No Data | #2,01,\r - Get software version |
| | | 02 | Get DSP Software Version | No Data | #2,02,\r - Get software version |
| | | | | | |
| | | 04 | Set Digital Input Name | 1, 2, 3 (AES/EBU) Name (Note - Name must be 10 chars max) | #2,04,2,DH9500\r - Name input 2 'DH9500' |
| | | 05 | Get Digital Input Name | 1, 2, 3 (AES/EBU) Name (Note - Name must be 10 chars max) | #2,05,3\r - Get AES/EBU Input name |

Replies from Control Commands and Updates

| Group Number | Group Name | Command Number | Command Description | Command Data | Example |
|--------------|--|----------------|--------------------------|---|---|
| 3 | Replies from Control Commands and Update | 01 | Source Changed | 1 - CD, 2 - IP1, 3 - IP2, 4 - USB, 5 - AES | #3,01,2\r - Input 1 Selected |
| | | 04 | Input Word Width | 00 - Invalid, 01 - 16bits, 02 - 17bits, 03 - 18bits, ... , 08 - 23bits, 09 - 24bits | #3,04,09\r - Word width is 24 bits |
| | | 05 | Input Sampling Frequency | 00 - Invalid, 01 - 32khz, 02 - 44.1khz, 03 - 48 khz, ... , 06 - 176.4khz, 07 - 192khz | #3,05,02\r - Sampling frequency is 44.1 kHz |
| | | 14 | Power State | 0 - Standby, 1 - On | #3,14,0\r - Put 850C in standby |
| | | 15 | LCD Brightness Changed | 0 - Off, 1 - Dim, 2 - Bright | #3,15,2\r - LCD set bright |
| | | 16 | Playing | No Data | #3,16,\r - Playing |
| | | 17 | Paused | No Data | #3,17,\r - Paused |
| | | 18 | Stopped | No Data | #3,18,\r - Stopped |
| | | 19 | Track Skipped Forward | No Data | #3,19,\r - Track skipped forward |
| | | 20 | Track Skipped Backward | No Data | #3,20,\r - Track skipped backward |
| | | 21 | Searching Forward | No Data | #3,21,\r - Searching forward |
| | | 22 | Searching Backward | No Data | #3,22,\r - Searching backward |
| | | 23 | Search Stopped | No Data | #3,23,\r - Search stopped |
| | | 24 | Track Number Selected | 01 to 99 | #3,24,10\r - Track number now 10 |
| | | 25 | Tray State | 0 - Open, 1 - Close, 2 - Tray Error | #3,34,0\r - Tray Open |
| | | 26 | Random Toggled | No Data | #3,26,\r - Random toggled |
| | | 27 | Remain Toggled | No Data | #3,27,\r - Remain toggled |
| | | 28 | Repeat Toggled | No Data | #3,28,\r - Repeat toggled |

| | | | | | |
|----------------|--|----|------------------------|--|---|
| 3 cont. | Replies from Control Commands and Update cont. | 35 | Play/Pause/Stop State | 01 - IDLE, 02 - TOC_READ, 03 - STOP, 04 - PLAY, 05 - PAUSE, 06 - FWD, 07 - REW | #3,35,04\r - In Play State |
| | | 36 | Track Name | Current Track Name (Max 35 Chars) | #3,36,xxx\r - Track Name is "xxx" |
| | | 37 | Track Artist | Current Track Artist (Max 35 Chars) | #3,37,xxx\r - Track Artist is "xxx" |
| | | 38 | Album Name | Current Album Name (Max 35 Chars) | #3,38,xxx\r - Album Name is "xxx" |
| | | 39 | Album Artist | Current Album Artist (Max 35 Chars) | #3,39,xxx\r - Album Artist is "xxx" |
| | | 41 | Filter Changed | 1 - LIN, 2 - MIN, 3 - STEEP | #3,41,1\r - Filter set to MIN |
| | | 42 | Digital Vol+ Processed | xxx | #3,42,xxx\r - Digital Vol Changed. xxx - new volume |
| | | 43 | Digital Vol- Processed | xxx | #3,43,xxx\r - Digital Vol Changed. xxx - new volume |
| | | 44 | Mute (Digital Vol) | No Data | #3,44,\r - Digital Volume Muted |
| | | 45 | UnMute (Digital Vol) | No Data | #3,45,\r - Digital Volume UnMuted |

Replies from Setup Commands

| Group Number | Group Name | Command Number | Command Description | Command Data | Example |
|--------------|-----------------------------|----------------|----------------------------|---|--|
| 4 | Replies from Setup Commands | 01 | Main Software Version | x.x | #4,01,1.2\r - Software is version 1.2 |
| | | 02 | DSP Software Version | xx.xx | #4,02,22.51\r - Software is version 22, build 51 |
| | | 04 | Digital Input Name Changed | 1 to 2, Name Note - Name will be 10 characters max | #4,04,2, DAB \r - Input 2 named 'DAB' |
| | | 05 | Digital Input Name | 1 to 2, Name Note - Name will be 10 characters max | #4,05,2, DAB \r - Input 2 name 'DAB' |

Error Messages

| Group Number | Group Name | Command Number | Command Description | Command Data | Example |
|--------------|----------------|----------------|---------------------------------|--------------|---------------------------------|
| 5 | Error Messages | 01 | Command Group Unknown | No Data | #5,01,\r - Command group error |
| | | 02 | Command Number in Group Unknown | No Data | #5,02,\r - Command number error |
| | | 03 | Command Data Error | No Data | #5,03,\r - Command data error |

Information in this document has been carefully checked for accuracy; however, Cambridge Audio's policy is one of continuous improvement, therefore design and specifications are subject to change without prior notice. If you notice any errors please feel free to email us at: support.cambridgeaudio.com

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