



APEX CloudPower installation amplifiers feature built-in DSP and secure, remote control over the cloud. CloudPower can be controlled and monitored from any device running the IntelliCloud WebUI*, via the amplifier's built-in WiFi hotspot. IntelliCloud is comprehensive yet straightforward, allowing multiple CloudPower units to be comfortably monitored and adjusted without the cost and inconvenience of a site visit. Local area network control over Cat5 cable is also supported.

CloudPower features an internal streaming source, enabling playback from Spotify or AirPlay direct from a mobile device, reducing the need for additional hardware. Comprehensive loudspeaker preset capability makes it quick and easy to integrate CloudPower into a system.

CloudPower is founded on proprietary GlidePath architecture, with DSP and amplifier circuits fully integrated for outstanding performance. GlidePath employs DC coupling throughout the signal path, dramatically reducing the time offsets and distortion associated with AC coupling. The result: crisper, punchier bass, and brighter, more natural high frequencies, delivering superb intelligibility and higher perceived volume.

Dante™ audio networking is supported through a 4 channel Dante module - this module is fitted as standard in CP354D, CP704D, CP1504D and CP3004D units and can be retrofitted to other models.

Whether deployed standalone or with multiple units in a comprehensive networked system, CloudPower offers a powerful, elegant solution for venues scaling from bars and hotels to auditoriums and stadiums.

* Requires an HTML5 compatible browser - Mac, iOS, Windows, Android.

FEATURES

- Remote management over the cloud
- Directly-drive low impedance or 70/100v loudspeakers
- High-efficiency, low idle power
- IntelliCloud WebUI
- Built-in Wi-Fi hotspot
- Daylight viewable colour OLED display
- 4-channel platform
- 350, 700, 1500, 3000 WPC options
- Unique internal streaming source supporting Spotify or AirPlay
- Source mixer
- 4-input Dante digital network module**

**Fitted as standard in CP354D / CP704D / CP1504D / CP3004D. Available as a retrofit option for CP354 / CP704 / CP1504 / CP3004.

SPECIFICATIONS

CloudPower Series

4 channel amplifier
with DSP and remote control

DATASHEET

Operating conditions				
Temperature	0° to 50° C, 10 to 60 % non-condensing			
Storage temperature	-20° to 70° C			
Safety / Compliance	CE Certificate			
Amplification and power supply				
Amplification class	Class D GlidePath technology			
Power supply model	Universal switch mode power supplies with active PFC			
Power Factor	> 0,9 above 1/2 P			
Mains Rating	100 - 240V @ 50-60 Hz			
Operating Voltage	90 - 260V			
AC Mains connector	IEC C20 Inlet (20 A max) , CP1504 -3004: Powercon 32A			
MAX AVERAGE POWER CONSUMPTION (1/8)	CP354 / CP354D	CP704 / CP704D	CP1504 / CP1504D	CP3004 / CP3004D
Watts (W)	700	700	1400	2800
Amps @ 230V	3.1	3.1	6.1	12.2
Amps @ 120V	5.9	5.9	11.7	23.3

Audio Specifications	
Frequency response	1Hz - 22kHz
Distortion THD+N	0,05% @ P/2 , 20Hz- 20 kHz, 22 kHz BW
Noise level (20 Hz - 20 kHz @ 8 ohm)	< 100 uV (A)
Latency	1 mS
Phase response	±10 deg 3 Hz - 20 kHz
S/N (20 Hz - 20 kHz @ 8 ohm)	CP354 - 704: 115 dB (A), CP1504 - 30004: 118 dB (A)
Damping factor	4000@8ohm <1Khz
Input sensitivity	Settable in speaker preset. By default analog in to amplifier output = 26dB

DSP	
Digital Signal Processor	64 bit FIXED POINT
I/O Routing	Flexible routing matrix

Dante Audio Networking	
Dante card prefitted in CP354D / CP704D / CP1504D / CP3004D. Retrofit option card available for CP354 / CP704 / CP1504 / CP3004	
4 Dante input channels with adjustable gain in the amplifier channel mixer	
Supports 48/96kHz Dante networks	
Two Gigabit network ports for the Dante network, configurable in switched or redundant mode	
Supports AES67	
Locate function (from Dante Controller, locate mode can be switched on to make the network port LEDs flash to locate them)	

User processing functions per channel	
Gain:	-80 to +15dB, 0,1dB steps
Polarity:	Normal / inverted
Delay:	0 to 250 ms (Shared between User and Group settings)
PEQ:	12 x PEQ. Each PEQ can be set to a choice of 16 filter types (1)
HP/LP filters:	Bessel , Butterworth and Linkwitz Riley with slopes from 6 to 48 dB/oct
Limiter:	Peak voltage, RMS voltage
Group processing functions	
Six global processing group overlays which can link any amplifier channel in the network	
Gain:	-80 to +15dB, 0,1dB steps
Polarity:	Normal / inverted
Delay:	0 to 250 ms (Shared between User and Group settings)
PEQ:	12 x PEQ. Each PEQ can be set to a choice of 16 filter types (1)
Speaker processing functions	
Gain:	-80 to +15dB, 0,1dB steps
Polarity:	Normal / inverted
Delay:	0 to 250 ms (Shared between User and Group settings)
PEQ:	12 x PEQ. Each PEQ can be set to a choice of 16 filter types (1)
HP/LP filters:	Bessel , Butterworth and Linkwitz Riley with slopes from 6 to 48 dB/oct
Limiter:	Peak voltage, RMS voltage
FIR filters:	768 taps per channel
(1) Filter types:	Bell-Sym,Bell-Asym, Notch, Low-Shelf 6dB or 12dB, High-Shelf 6dB or 12dB
	All-Pass 90° or 180°, High-Pass 6dB, or 12dB, High-Pass Vari-Q 12dB,
	Low-Pass 6dB or 12dB, Low-Pass Vari-Q 12dB, Band-Pass
Circuit protection	
Mains and power supply	Under, over voltage, over current protection
Power outputs	DC, Over-temp, Over-current limiter, VHF
Cooling	Cooling fans with signal control speed
Inputs	
Analog	4 balanced analog line inputs 4x 3-pin Phoenix
A/D conversion	32 bit
Input impedance	10k Ohm
Max. Input level	21 dBu
Digital	4 input Dante (integral in CP354D / CP704D / CP1504D / CP3004D. Retrofit module available for CP354 / CP704 / CP1504 / CP3004)
Internal Streaming source	Two channel internal streaming source supporting Spotify and AirPlay
Remote control and monitoring	
Network connection	Single port Ethernet interface
Apex remote control software	Web UI with built in web-server
Front panel indicators	
Daylight viewable colour OLED display	Real time level , limit and fault indicators

Amplifier model	CP354 / 354D	CP704 / 704D	CP1504 / 1504D	CP3004 / 3004D
Total burst power (all channels driven)	1400	2800	6000	12000
2 ohms (with correct limiter setup***)	350	700	1500	3000
4 ohms	350	700	1500	3000
8 ohms	350	500	1500	2000
16 ohms	250	250	1000	1000
Hi-Z 70V	280	280	1500	1500
Hi-Z 100V	NA	NA	1500	2500
Peak output voltage per channel	90Vpk	90Vpk	180Vpk	180Vpk
Max output current per channel	10Arms	14Arms	20Arms	28Arms
Max Output Power bridged mode				
4 ohms	700	1400	NA	NA
8 ohms	700	1400	NA	NA
16 ohms	700	1000	NA	NA
Hi-Z 70V	700	1000	NA	NA
Hi-Z 100V	700	1000	NA	NA
Power and Thermal 115V				
Standby power consumption	11W	11W	15W	29W
Idle Power	30W	30W	60W	120W
Idle Current Draw	0.3A	0.3A	0.6A	1.2A
Idle Thermal loss	102 BTU/h	102 BTU/h	204 BTU/h	408 BTU/h
1/8 Power @ 4 Ohm Power	185W	375W	800W	1600W
1/8 Power @ 4 Ohm Current Draw	1.6A	3.3A	7A	14A
1/8 Power @ 4 Ohm Thermal loss	341 BTU/h	682 BTU/h	1364 BTU/h	2729 BTU/h
Power and Thermal 230V				
Standby power consumption	11W	11W	15W	29W
Idle Power	30W	30W	60W	120W
Idle Current Draw	0.15A	0.15A	0.3A	0.6A
Idle Thermal loss	102 BTU/h	102 BTU/h	204 BTU/h	408 BTU/h
1/8 Power @ 4 Ohm Power	185W	375W	800W	1600W
1/8 Power @ 4 Ohm Current Draw	0.8A	1.65A	3.5A	7A
1/8 Power @ 4 Ohm Thermal loss	320 BTU/h	640 BTU/h	1280 BTU/h	2560 BTU/h

*** For best performance in 2 ohm, current clip should be avoided by lowering the Voltage Peak Limiter Value.
Use APEX IntelliDrive built-in Peak Limiter Calculation tool to define the right value.

Physical

Unit Dimensions	483 x 44.5 x 358 mm	483 x 44.5 x 358 mm	483 x 44.5 x 458 mm	483 x 44.5 x 458 mm
Shipping Dimensions	610 x 150 x 420 mm	610 x 150 x 420 mm	610 x 150 x 610 mm	610 x 150 x 610 mm
Unit Weight	5 kg - 11 Lbs	6 Kg - 13 Lbs	8 kg - 17 Lbs	10 kg - 22 Lbs
Shipping weight	6.5 Kg - 14.5 Lbs	7.5 Kg - 16.5 Lbs	9.5 Kg - 21 Lbs	11.5 Kg - 25 Lbs

CP354 / CP354D / CP704 / CP704D



CP1504 / CP1504D / CP3004 / CP3004D

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