



XAP / Converge Pro Feature Comparison

Feature / Item	Converge Pro	XAP
Mixers	Converge Pro 880 (8 Mic/Line Inputs, 4 Line Inputs, 12 Outputs)	XAP 800
	Converge Pro 8i (8 Mic/Line Inputs, 4 Line Inputs, 0 Outputs)	No Equivalent
	Converge Pro 840T (4 Mic/Line Inputs, 4 Line Inputs, 9 Outputs, 1 Telco)	XAP 400
	Converge Pro TH20 (1 Telco, 2 Line Inputs, 2 Outputs)	XAP TH2
Peripherals	Built-in Ethernet	XAP Net
	Installed Controller	Installed Controller
	Not Compatible	XAP IR Remote
	Not Compatible	Volume/Select Panels
Mic/Line Selectable Inputs	8 Mic/Line Selectable Channels (4 on 840T)	8 Mic/Line Selectable Channels (4 on 400)
	Analog Gain: 0dB to 56dB Selectable in 7dB steps	Analog Gain: 0dB to 55dB with three steps 0dB, 25dB and 55dB
	Fine Gain: 20dB to -65dB in .5dB steps	
	Frequency Response 20Hz to 20kHz -- SNR 80dB re 0dBu (A weighted) -- Dynamic Range 100dB -- THD <0.02% -- EIN -126dB at max gain -- Input Impedance 5k ohm	
	24V Phantom Power	
	AEC with 130ms Tail time -- Adjustable NLP (Soft 6dB, Med 12dB, Aggr. 18dB) -- AEC Reference assignable to any output, 4 virtual reference channels and 4 expansion bus references -- PTT Detection	AEC with 130ms Tail time -- Adjustable NLP (Soft 6dB, Med 12dB, Aggr. 18dB) -- AEC Reference assignable to any output, 4 virtual reference channels and 4 expansion bus references
	Noise Cancellation 6dB to 15dB adjustable in 1dB steps	
	AGC, configurable -- ALC (compander) -- Filters, 4 nodes selectable PEQ, HP, LP, AP, Notch	
Line Inputs	4 Line Inputs -- Adjustable Gain 20dB to -65dB in .5dB steps -- Adjustable AGC -- 5Kohm input impedance	
Line Outputs	12 Line level outputs (8 on 840T) -- Adjustable gain 20dB to -65dB -- Selectable NOM -- 50ohm output impedance	12 Line level outputs (8 on 400) -- Adjustable gain 20dB to -65dB -- Selectable NOM -- 50ohm output impedance
Speaker Output	10 watt single speaker output (840T only). Same settings as Line Outputs	
Processing Channels	8 Configurable Processing Channels (4 on 840T)	8 Configurable Processing Channels (4 on 400)
	Channel Mute -- Fine gain 20dB to -65dB in .5dB steps	
	Filters, 15 nodes selectable PEQ, HP, LP, AP, Notch, High/Low Shelving, CD Horn, Bessel/Butterworth/Linkwitz Riley Crossovers	
	Delay 250ms adjustable -- Configurable compressor with channel grouping	
Fader Channels	4 Fader Mix Channels	NA
	Channel Mute -- Fine gain 20dB to -65dB in .5dB steps	NA
Auto Mixer (Mic Gate Settings Per Mic)	Selectable Auto Gate or Manual on/off	
	Configurable Gate Ratio -- Off Attenuation -- Hold Time -- Decay Rate -- PA Adaptive Mode	
	Selectable Adaptive Ambient or Manual Ambient	
	4 internal (unit) and 4 external (system) gating groups with First Mic Priority, Last Mic Mode, Max # of Mics, Chairman Override. Mic can also be removed from all gate groups.	
	Gating Post AEC	

Feature / Item	Converge Pro	XAP
Matrix Mixer	Independently selectable Gate and Non Gate cross points from Mics to any output	
	Pre AEC (AEC Bypass) route selectable at the cross point from any mic channel to any output	NA
	Cross point Gain and Attenuation +12dB to -60dB in .5dB steps	Cross point Attenuation 0dB to -60dB in .5dB steps
Control	USB	NA
	RS232 up to 115K (Cannot connect with Console, 3rd party control only) with expanded command set (API)	RS232 up to 57.6K (G Ware and 3rd party control)
	GPIO, programmable control and status pins (Port A) and Preset control mask (Port B)	
	Dual port Ethernet connection (PC port and LAN port)	NA (Requires external XAP Net)
	NA	RS485 control (Wall panels and IR remote)
	Interfaces to an optional ClearOne Tabletop Controller	
	Front panel control	
Expansion	Linkable up to eight 880's, eight 8i's, eight 840T's and 16 TH20's up to 64 mics.	Linkable up to eight 800's, eight 400's and 16 TH2's up to 64 mics
	Up to 200 feet between linked units including TH20's.	Up to 80 feet between linked units not including TH2's
	12 mix minus, bi-directional digital audio busses with global NOM count on busses O-R -- Control bus -- 4 Ebus AEC references -- 4 global gating groups	
	Converge Pro 8i Input Expansion Unit with 8 Mic/Line inputs and 4 Line Inputs and all the features and capability of the 880 without the output channels	NA
Telephone Interface	Built in analog telephone interface on the 840T and a TH20 dedicated telephone interface	Built in analog telephone interface on the 800 and a TH2 dedicated telephone interface
	TH20 supports audio on the Ebus with internal matrix	TH2 requires external audio connections
	Noise Cancellation on the Receive Input of the TH20 and 840T	Noise Cancellation the XAP400 Receive Input, none on the TH2
	Receive Input ALC	
	Ringer with Ringer Selection (3 Types)	Default Ringer, no selection
	Improved dial tone, ringer detection and off hook DTMF generation process	NA
	International support expanded	International support
	DTMF, Dial Tone, Hook Indication and Ringer level control -- Hook Flash duration adjustment -- Telco Meters	
	TEC with auto adaption and selectable burst adapt mode	
	Selectable Auto Answer (2, 3 and 4 rings) and Selectable Auto Disconnect (Loop Drop, Call Progress)	Selectable Auto Answer and Selectable Auto Disconnect (Loop Drop, Call Progress)
	Caller ID - Type II	NA
	ClearEffect processor on Telco Receive	NA
	20 Entry Phonebook and Speed Dial	10 Entry Phonebook and Speed Dial
Presets / Macros	32 presets capable of partial or full unit configurations including routing, channel settings and GPIO. GPIO and Serial control mask with auto execute via GPIO control port B	
	Improved preset presentation with "Include in Preset" check boxes on every input / output, etc. in addition to the matrix, gate groups and GPIO	Check boxes on matrix, gate groups and GPIO/control only
	255 Macros at approx. 150 commands each. Configurable across multiple units	

Feature / Item	Converge Pro	XAP
System Management	Timed Events, 10 per unit	NA
	SNMP ClearOne MIBs with Traps & Get/Set	NA
	SMTP, send emails on traps	NA
	Event/Device Log	NA
	Embedded web server (One web interface per system)	NA (Requires external XAP Net. (The XAP Net's web server allows live control of any unit in system)
Other	String based command strings (7)	
	Security, three levels: Admin, Maintenance and end user.	Front panel, XAP Net - one level
	Firmware updates - USB, IP & web - Global, simultaneous updates on multi-unit systems.	Firmware updates to individual units with a local connection. Global updates with XAP Net
	XAP - Converge Pro site file conversion utility	NA
Configuration Software	Console - Complete system configuration, control and monitoring capability	GWare - Complete system configuration, control and monitoring capability
	Active Unit View / flow diagram with basic channel controls -- Audio presence indication -- Route Indication from any input and output	Passive Unit View / flow diagram with shortcuts to interactive areas.
	Channel View with access to all channel settings and meters -- Channel cross points/routing within channel view -- Select routed to/from channels for complete channel configuration from in to out.	Group channel view with access to all channel settings and meters
	AEC and Gating configuration per channel and a Global AEC reference and Gate Group (with links to individual channel gate setup) configuration views	AEC and Gating configuration per channel with a global Gate Group configuration view
	Drag and drop configuration of ClearOne and user defined A/V objects from the Console A/V object Database. -- Database Builder	NA
	Drag and drop Channel, Matrix, GPIO and Macro objects. User definable	NA
	Improved Signal Generator (white noise, pink noise, tone with sweep) with definable timeout.	Signal Generator (White noise, pink noise, tone with sweep)
Diagnostics	System Checks including Microphones, Outputs, Telco and Network	NA
	System gate and meter view	
	Enhanced, always active, meters with peak hold and faster streaming.	Meters are activated via checkbox
	Mini Phoenix audio connectors - Color coded per channel type	Standard Phoenix audio connectors
Interface/Connections	Front panel USB interface	All connections on rear panel
	Front panel LEDs to indicate Gate and Mute status of individual channels -- Assignable LED meter	Front panel LEDs to indicate Gate status of individual channels -- Assignable LED meter
	Back lit graphical LCD on front panel to access menu functions (limited control and meters) with IP address displayed on default screen	Back lit LCD on front panel to access menu functions (limited control and meters)
	NA	Telco re-null capability from the front panel (400/TH2) (Press and hold ON button)