



884+ AUTOMATIC MATRIX MIXER CONTROL SYSTEM

Special Features

- 8 x 4 Matrix Mixer with Switchable Mic/Line Inputs Selectable for Automix, Manual Mix, or Ivie's Exclusive Vox Operation.
- Up to Four, Independent Automixers in One Box.
- Automatic level control on each input
- Once programmed via AudioNet⁺, no host computer is required for operation
- A Whole Family of Available Remote Controls Provide Simple yet Powerful User Interface.
- UL[®] Listed, External Power Supply.

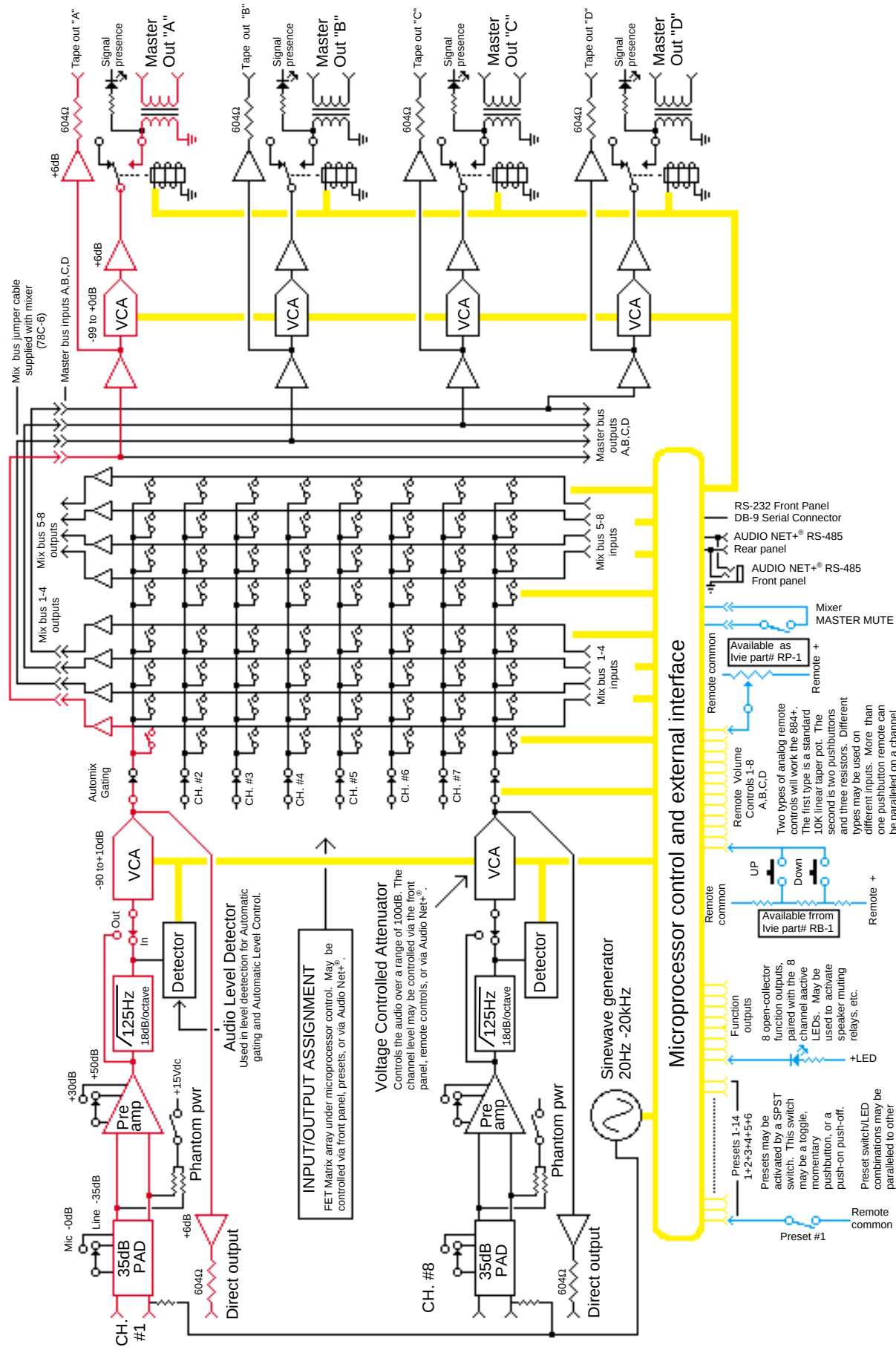


The 884+ Automatic Matrix Mixer and Control System from Ivie represents a significant advancement in user friendly, highly flexible, computer controllable mixers. Like its manual mixer cousins, the 784+ Programmable Matrix Mixer and Control System, the 884+ is easily programmed via Ivie's Audio Net⁺ protocol, using an IBM[®] compatible PC with EGA graphics capability. Once programmed, the 884+ can be operated by a computer, but it does not require a computer to operate. Ivie offers a complete line of simple, user friendly, remote controls that can be used to activate all of the 884+'s custom programmed functions. Simple pots or up/down buttons can be used for remote volume control, and remote push button switches (either toggle or momentary) can be used to activate pre-programmed functions such as zone paging, room combining, or automatic signal rerouting and EQ changing. Even microprocessor based "smart remote controls" are available with features like built-in programmability, LED level indication, and automatic tracking with other remote controls connected in parallel.

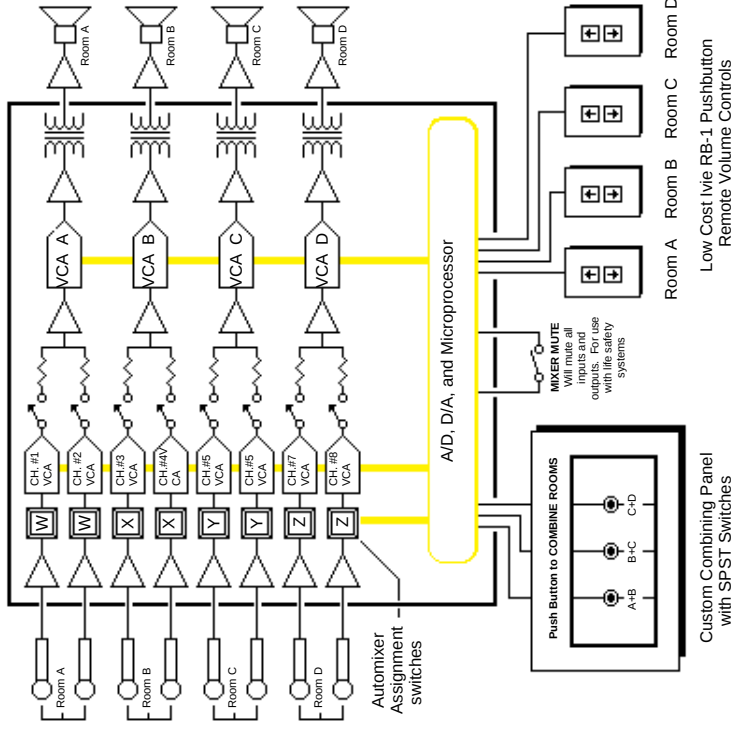
The 884+ is a true matrix mixer with eight mic/line inputs and four outputs. Any input may be assigned to any or all outputs, and the level of all inputs and outputs can be controlled remotely. There are eight internal mix buses in the 884+, which allows it to be ganged with other 884+'s, and/or 784+ Ivie matrix mixers to provide a 16 by 8 matrix. Additional mixers can be ganged to add inputs, but the number of outputs in the matrix will not exceed eight. The 884+ Automatic Matrix Mixer can also be subdivided into up to four separate automatic mixers. For example, the 884+ could function as one 8x1, 8x2, 8x3 or 8x4 automixer, or it could function as two 4x1 or 4x2 automixers, or as four 2x1 automixers. In addition to automix operation, inputs may also be assigned to manual on/off operation, or Vox operation. In Vox operation, the input is gated, but is not associated with any other inputs in an "automatic mixer" fashion. Automatic Level Control can be turned on or off for each input channel separately.

- Associate Any Input Channel with Any Internal Automixer.
- May be Configured as One 8x1 Automixer, or Two 4x1 Automixers, or Four 2x1 Automixers, or One 2x1 Automixer and One 6x3 Automixer, etc.
- Adjustable Release Time on All 4 Automixers.
- Adjustable NOM from 0 to 6dB on All 4 Automixers.
- Ivie's Innovative "Last On" Feature on All 4 Automixers.
- Logic Output for Each Input Channel (Can be Used to Activate Presets).
- Eight Front Panel "Channel Active" LED's.
- Computer Programmable and Monitorable: IBM[®] Compatible.
- Can be Easily Ganged with Other Ivie Matrix Mixers
- Built-in Custom Room Combining Capability.
- 15 "Nonexclusive" Presets (More than One Preset can be Active at Once).
- All Remotes (Volume, Room Combining, Presets, etc.) are DC Controls.
- 4 Transformer Balanced Outputs
- Presets Control all Mixer Functions: Input/Output, Gain Structure, Mix Buss Assignments, Remote Controls, Automix/Manual.
- RS-232 & RS485 Control Ports Standard.
- Multiple Outputs can be Used as a Distribution Amplifier.
- Phoenix Connectors for Greatly Reduced Installation Time.
- Master Mixer Mute for Interface with Life Safety Systems.
- Remote Interface via Modem.

884+ PROGRAMMABLE MATRIX MIXER BLOCK DIAGRAM

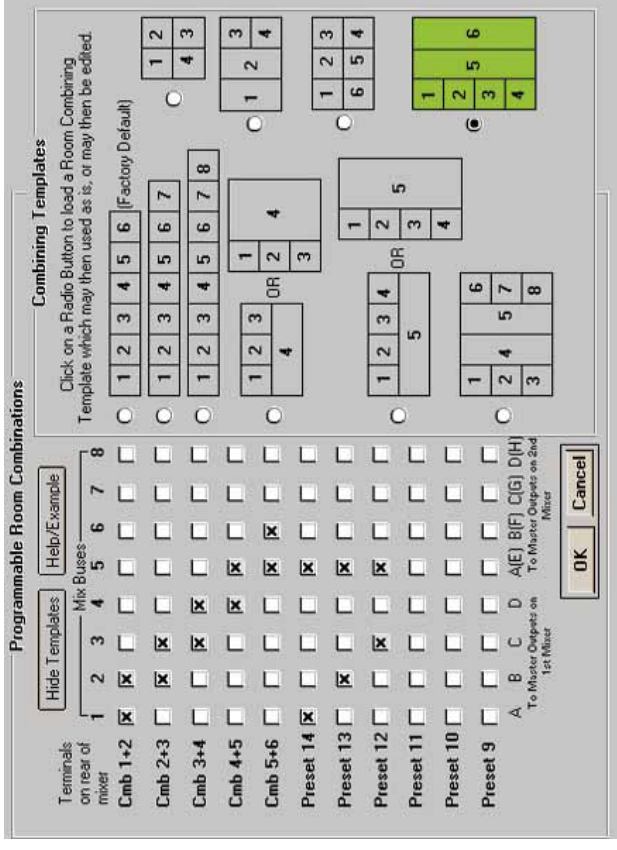


Ivie 884+ configured as four 2x1 automixers with remote volume controls and room combining.



APPLICATION #1 shows a single 884+ configured as four 2x1 automixers with remote volume controls and room combining. Four small meeting rooms can be handled with a single mixer. The room combining panel shown is simply 3 SPST switches, either with or without LED's for positive indication. The remote controls for each master output are Ivie's low cost, push button volume controls. When rooms are combined, the automixers for each room are tied together into one bigger automixer, and the remote volume controls can gang and track one another, if desired. Then master volume control for both (all) rooms can be actuated from any (all) remote controls. The last feature shown is a Master Mixer Mute which mutes all inputs and outputs upon command. This feature allows the interfacing of the 884+ to life safety systems.

Custom Room Combining right out of the box!



Maximum choice, minimum programming effort puts the installer in command.

Ivie matrix mixers can now combine up to eight rooms with up to eleven combining nodes and all eleven nodes can be contact closure activated! If "contact closure" activation of more than five room combining nodes is needed, the software allows the reassignment, for use in room combining, of up to six more contacts normally associated with presets. This, of course, reduces the number of contacts available for activating presets, but the allocation of resources is determined by the installer, based on the requirements of the application.

Ivie has made the programming for room combining as simple as possible. A number of common, room combination templates are provided that, when selected by a single "click" of the mouse, complete the necessary programming.

If the room layout does not follow one of the provided templates, step-by-step programming of the various room combinations can be done and there are help screens and programming examples to step the programmer through the process.

884+ Automatic Matrix Mixer Control System



FRONT PANEL

The 884+ front panel has a "Channel Active" LED for each of the eight input channels, an Audio Net® RS485 jack, an Audio Net® RS232 DB-9 serial connector, four channel-output signal presence indicators, and three RS232-485 communication status lights. Access to the Audio Net® RS485 buss is also available on the rear panel. An advantage of the live Ivie Audio Net® protocol is that an 884+ can be accessed over a phone line via modem. In this manner, remote programming and control are possible, as well as system troubleshooting and verification of system configuration. When multiple Audio Net® compatible mixers in a rack are looped together via their rear panel Audio Net® connectors, a computer (or modem) connected to any one mixer will allow all mixers to be accessed.



REAR PANEL

As with other Ivie rack mounted mixers, ease of wiring is a primary concern. All system connections are made using clearly labeled Phoenix style connectors. No soldering of XLR, or any other type connectors, to incoming lines is necessary. Wires need only be stripped, plugged into the appropriate socket, and the screw tightened. These connectors allow the installer to pre-wire racks, and if necessary, mixers can be removed without disconnecting the wires. Ganging a 784 series mixer with an 884PW is accomplished by using DIN cables which are available directly from Ivie. Wiring simplicity and speed are assured.

Programming the 884+ mixer by computer is simple. All you need is standard Windows 95/98 based PC (faster is better) equipped with a mouse, a serial port, and VGA graphics.

You can directly access the 884+ from your standard PC using a straight serial cable from your PC's serial port to the 884+'s front panel serial connector. If longer control runs are needed, you can connect your PC to Ivie's Model 78-232A (RS232 to RS 485 adaptor), which can extend separation between the mixer and PC by up to 4000 feet. One of the standard setup screens is shown as an illustration. It graphically illustrates the inputs and outputs in a matrix configuration. To connect an input to a particular output, simply "push" the appropriate button. A button is "pushed" by placing the

mouse cursor on the button and clicking the mouse. Buttons which have been "pushed" are visually indicated, so the entire setup can be identified at a glance. The graphic user interface makes setup quick, accurate, and intuitive, and a single computer can control multiple mixers.



COMPUTER SCREEN

Input and output levels can be adjusted, ranges can be set, individual inputs can be designated as automix, VOX, or manual (non-gated), and rooms or zones can be combined or uncombined. Entire setup configurations can be stored as one of the fifteen available presets, and presets can be activated remotely by the touch of a button, or via low voltage, DC lines.

The 884+ is also capable of interface with touch panel control systems such as AMX® and Crestron®.

SPECIFICATIONS

Frequency Response: ± 1 dB 30Hz to 20kHz.

Equivalent Input Noise: -125dBm with no weighting.

Input channel common mode rejection: greater than 90dB @ 20kHz
Inputs: electronically balanced, switchable between microphone and line level inputs.

Input Impedance: microphone – 50-600 ohms (actual 2.1k Ω) line – 40k Ω (actual 40k Ω).

Phantom Power Voltage: +15VDC.

Channel Attenuation/Isolation: greater than -90dB @ 1kHz.
Greater than -80dB @ 20kHz.

Channel Cross Talk: greater than -90dB @ 1kHz.
greater than -70dB @ 20kHz

Master Outputs: Transformer balanced, will drive load 600 ohms or greater. (actual impedance = 160 Ω).

Tape Outputs: Unbalanced (actual impedance = 604 Ω).

Direct Outputs: Unbalanced (actual impedance = 604 Ω).

Total Harmonic Distortion: Less than .01% 30Hz to 20kHz.

Maximum Master Output Level: +18dBm.

Maximum Gain: 70dB.

Size: 1 3/4" H x 19" W x 10" D.

Weight: 12 Lbs. with External Power Supply

Shipping Weight: 16 Lbs.



1605 NW State Street
Lehi, Utah 84043
Phone: (801) 766-7600
Fax: (801) 766-8282
Internet: www.ivie.com
Email: ivie@ivie.com