VARIODYN ONE

Intelligent Network Controller – INC

APPLICATION

The INC (Intelligent Network Controller), as the name suggests, is the main controller of the VARIODYN® ONE PAVA system. It is responsible for managing and monitoring all key components of the system including power amplifiers, speaker lines and call stations, etc.

INC supports 8 amplifier channels with the maximum capacity of 5 A current per channel and you can add up to 48 speaker lines using 6 speaker line modules with 8 speaker lines each in a single INC.

INC comes with an inbuilt storage that can be used to store both configuration and audio files. The four different configurations available in INC offer flexibility to choose the controller with the appropriate extension module as per your requirement.

INC supports Relay Matrix mode of operation that ensures that you can design your system efficiently as per your project requirement.



INC - 585000



INC-D - 585000.21



INC Dante - 585000.22



INC A - 585000.23

FEATURES AND BENEFITS

- Supports 8 to 48 speaker circuits per controller (expand using field mountable Speaker Circuit Modules with 8 speaker circuit/module)
- Inbuilt Relay Matrix Mode to dynamically allocate amplifier channels to speaker circuits
- Supports up to 8 Amplifier channels
- Supports 8 simultaneous Audio per controller
- Intuitive front facia or front panel ensuring you can easily understand the system status
- INC-D with 8 DAL ports and 12 GPIOs
- INC-A with 6 Audio In/Out with 12 GPIOs
- INC - DANTE with 8 In and 8 Out DANTE port with 12GPIOs
- New software to provide ease of commissioning

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INC VARIANTS

INC - 585000



Features - INC:

- "Direct Drive" or "Relay Matrix" operating modes provide flexibility
- Built-in memory for configuration and audio files (1.5 GB/ 8 hrs)
- Manages up to 8 amplifier channels (max. 500 W per channel)
- Up to 48 speaker circuits divided into 6 modules with 8 speaker circuits each (max. 500 W per loudspeaker line)
- 8 simultaneous Audio streams per controller
- Intuitive Display interface ensuring you can easily understand the system status

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INC-D (WITH DAL PORTS) - 585000.021



Features - INC-D:

- "Direct Drive" or "Relay Matrix" operating modes provide flexibility
- Built-in memory for configuration and audio files (1.5 GB/ 8 hrs)
- Manages up to 8 amplifier channels (max. 500 W per channel)
- Up to 48 speaker circuits divided into 6 modules with 8 speaker circuits each (max. 500 W per loudspeaker line)
- 8 simultaneous Audio streams per controller
- Intuitive Display interface ensuring you can easily understand the system status
- 8 DAL bus inputs for intercoms and UIM
- 12 Potential-free input and output contacts
  - *8 ports configurable as input/output; shared potential Connection*
  - *4 ports configurable as input/output and monitorable; shared potential*

INC-DANTE -585000.22



Features - INC-DANTE:

- "Direct Drive" or "Relay Matrix" operating modes provide flexibility
- Built-in memory for configuration and audio files (1.5 GB/ 8 hrs)
- Manages up to 8 amplifier channels (max. 500 W per channel)
- Up to 48 speaker circuits divided into 6 modules with 8 speaker circuits each (max. 500 W per loudspeaker line)
- 8 simultaneous Audio streams per controller
- Intuitive Display interface ensuring you can easily understand the system status
- 2 DANTE Netzwerk Ports
  - *8 virtual Audio Input+ 8 virtual Audio Output*
- 12 Potential-free input and output contacts
  - *8 ports configurable as input/output; shared potential Connection*
  - *4 ports configurable as input/output and monitorable; shared potential*

INC-A-585000.23



Features - INC-A:

- "Direct Drive" or "Relay Matrix" operating modes provide flexibility
- Built-in memory for configuration and audio files (1.5 GB/ 8 hrs)
- Manages up to 8 amplifier channels (max. 500 W per channel)
- Up to 48 speaker circuits divided into 6 modules with 8 speaker circuits each (max. 500 W per loudspeaker line)
- 8 simultaneous Audio streams per controller
- 8 hours of audio storage
- Intuitive Display interface ensuring you can easily understand the system status
- 6 audio outputs, 6 audio inputs
  - *also usable for sensor microphones for background noise and automatic volume control*
- 12 Potential-free input and output contacts
  - *8 ports configurable as input/output; shared potential Connection*
  - *4 ports configurable as input/output and monitorable; shared potential*

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INC SPECIFICATION

GENERAL	
Mains power supply	AC 115 V - 230 V (-15% ... +10%), 50 ... 60 Hz
Backup power supply	21.5 V - 28.8 V DC
Sampling rate	48 kHz, 24 bit
Encode/Decode	VARIODYN® ONE ADPCM
Audio storage	1.5 GB
Relative humidity	<95%, No condensing
Operation temperature	-5°C ... +55°C
Storage temperature	-40°C ... +70°C
Dimensions (W x H x D)	483 x 88 x 415 mm
Weight	11.9 - 12.45 kg

AF OUTPUT	
Output Type	Electronically balanced
Audio Output Channels	8
Nominal Output Level	0 dBu
Max. Output Level	+6 dBu
Frequency Response	20 Hz ... 20 kHz, ≤±1 dB
THD	< 0.03% at 1 kHz
SNR	> 85 dB A-weighted
Load impedance	Min. 5 kΩ, Max. 500 pF

SPEAKER LINES	
Max. voltage of switching contact	250 V AC
Max. current of switching contact	5A continuous current
Peak voltage resistance	Min. 1.5 kV
Slots of speaker line module	Max. 6
Number of speaker line per module	8
Line voltage	70 V/100 V

AUXILIARY AUDIO INPUT/OUTPUT(OPTIONAL)	
Audio Input Channels	6
Input type	Balanced and Earth isolated
Nominal Input Level	Microphone: -51 dBu Line: 0 dBu ... +6 dBu
Frequency Response	Microphone: 100 Hz ... 8 kHz at ± 6 dB Line: 20 Hz ... 20 kHz, ±3 dB
THD	< 0.05% at 1 kHz
SNR	Microphone: > 65 dB, A-weighted Line: > 95 dB, A-weighted
Input Impedance	Typical: 200 Ω
Audio Output Channels	6
Nominal Output Level	0 dBu
Frequency Response	20 Hz ... 20 kHz, ±3dB
THD	< 0.05% at 1 kHz
Max. distortion factor	1% in the frequency range
SNR	> 85 dB A-weighted
Output Impedance	200 Ω

DANTE (OPTIONAL)	
Ethernet	Primary and secondary Ethernet ports, 100 Mbps
Audio Transport Format	Dante audio over IP, AES67 RTP
Sampling Rate	48kHz/24bit, PCM
Input channels	8
Output channels	8
Audio latency	<10ms

CONTACT INTERFACE (OPTIONAL)	
INPUT CONTACT	
Max. Input Voltage	24 V DC
Input Voltage Logical 0	> 8.5 V DC @ 5.6 kΩ
Input Voltage Logical 1	< 7.5 V DC @ 4.5 kΩ
Input Resistance	10 kΩ

OUTPUT CONTACT	
Max. External Voltage	24 V DC
Load Current per Output	Max. 50 mA
Short-circuit Proof Against + 24 V	1s

ORDER INFORMATION

MODEL NAME	PART NO.	DESCRIPTION
INC	585000	Intelligent network controller without any optional modules
INC-D	585000.21	Intelligent network controller with DAL module (8 DAL ports) and 12 GPIOs
INC-Dante	585000.22	Intellegent network controller with Dante module (8x8) and 12 GPIOs
INC-A	585000.23	Intellegent network controller with Audio in/out module (6 in/out) and 12 GPIOs

ACCESSORIES

MODEL NAME	PART NO.	DESCRIPTION
SPKR-8	585020	8 Speaker Line Module

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