Digital Matrix Intercom

Commander
Orator

trilogy

System

Commander and Orator digital matrix intercom systems are well proven with hundreds of installations across the world offering reliable communication in all conditions. They may be used separately or in combination with each other. It is also possible to integrate systems with Trilogy's Mercury IP intercom technology which may be used to provide an IP based extension to an existing system or a networked addition to Commander and Orator creating a uniquely flexible solution for all communication needs.

Commander

Commander is a large capacity system with up to 576 x 576 port capacity. Each 6RU frame takes up to sixteen matrix port cards each of which handles 6 ports providing a frame capacity of 96 x 96. Up to six frames may be linked directly together to increase the capacity to 576 x 576. Additional capacity can then be added by networking with other Commander or Orator systems. The "core matrix set" provides the frame, psu, tdm and talkback controller cards. This may be upgraded to add redundant power supplies and back up tdm and talkback controller cards where required.

Orator

Orator is a very cost effective system in a 2RU frame. Supplied as standard with 18 x 18 ports, an additional field upgrade adds a second card with 18 x18 capacity to provide a 36 x 36 matrix. A second hot swappable, redundant power supply may also be fitted.

Commander digital matrix intercom installed at BBC London

The link between matrices and control panels is via CAT 5 cable with RJ45 connectors. Each matrix port can be used for panels or 4 wire connections in any combination.

Commander and Orator matrices may be connected together as required to produce multi point networked configurations using E1 digital links or RS422 and standard audio trunk lines. It is also possible to link with Trilogy Mercury IP intercom systems and to use a Mercury Interface Unit (MIU) to provide remote, IP links.

Link to Mercury IP intercom

Orator matrix

UHF radio base station

E1 digital link or RS422/ audio trunk networking

Dual channel telephone interface

Single or dual channel wired beltpacks

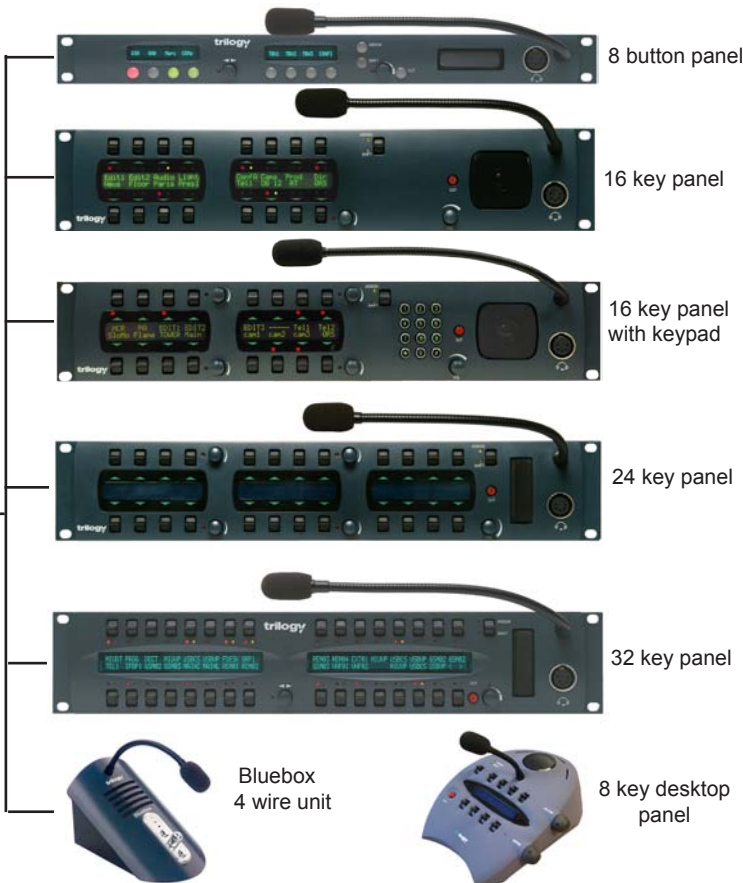Configuration editor pc

Commander matrix

Panels

A wide range of control panels is available in 1RU, 2RU and deskmount formats to suit differing requirements. Numbers of keys or pushbuttons vary from 1 to 32 (more to special order).

Features include:

• *Key assignment to any source or destination*

• *Key action can be configured as speak, listen, speak / listen, gpi triggers - with latching or non latching function (all software configured)*

• *Shift key access to second level assignment*

• *5 character labels*

• *Local gpi's*

• *Assign key allows user to reassign any or all keys*

• *Telephone keypad allows dialling of any number via optional telephone interface unit**

• *Assignable gain controls*

• *Quick response key (QRS) with 8 call stack*

• *Custom panels to special order*

*certain panels only

8 button panel

16 key panel

16 key panel with keypad

24 key panel

32 key panel

Bluebox 4 wire unit
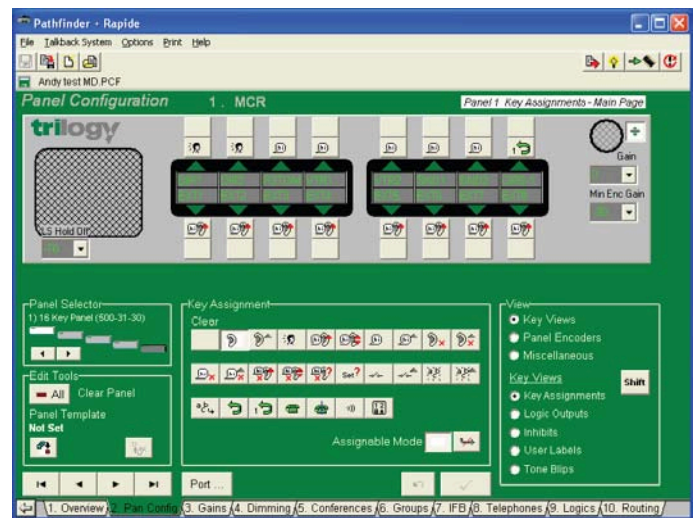
8 key desktop panel

Interfaces

All matrix ports on Commander and Orator may be used for panels, 4 wire connections etc. in any combination. In addition, a wide range of other equipment may be interfaced to the matrices including:

► ***Beltpacks***

► ***Headsets***

► ***Telephone interfaces***

► ***UHF / VHF radio (wireless talkback)***

► ***Presenters wireless earpiece***

► ***DectCom licence free wireless***

Software

Screenshot of Pathfinder configuration editor

Both Commander and Orator are able to store four complete configurations within the matrix itself and these can be selected and run at any time without the matrix being connected to a PC. To prepare and edit these configurations, a software editor package is required. Commander uses Pathfinder whilst Orator uses Pathfinder Lite for this task. In both cases an optional add-on known as Rapide allows changes to be made whilst the system is online (with PC connected).

Key actions, panel labels, gains, groups, conferences, QRS key, dimming, network trunks, IFB's etc. may all be set using these intuitive Windows based tools .

Specification

Orator matrix

2RU rack mounting

Capacity -18 x 18 or 36 x 36 field expandable

Commander matrix

6RU rack mounting plus 2RU power supply

Capacity - 96 x 96 in one frame (16 x 6 port cards)
Six frames may be directly linked together to provide 576 x 576 in a continuous matrix

Connectors - RJ45 for panels and 4 wire ports

Audio inputs - electronically balanced, earth free
                (transformer isolation optional on Commander)

Maximum level +20dBu

Audio outputs - electronically balanced, earth free
                (transformer isolation optional on Commander)

Maximum level   +20dBu into 600 ohms

Gain adjustment -37 dB to +12dB

Frequency response 20 Hz to 14 kHz ± 3 dB

Noise -60dB CCIR quasi peak weighted

Response time < 40mS from keypress to crosspoint operation

Ordering information

Commander matrix

Commander Core Matrix 8RU Set **500-50-00**
The Commander Core Matrix Set includes a 6 RU matrix frame with 1 TDM controller card, 1 Talkback controller card, 1 Changeover Board, and a 2 RU power supply chassis fitted with a single PSU

Commander Control Card Redundancy Set **500-55-00**
Comprises 1 TDM Controller Card and 1 Talkback Controller Card
.
Commander Redundant Power Supply **500-15-30**

Commander 6 Channel Matrix card **500-06-02**

Matrix card Rear Connector - RJ-45 Connectors **500-07-50**
RJ-45 Connectors plus D25 wired in parallel.

Matrix card Rear Connector - D9 connectors **500-07-20**
D9 Connectors with input/output transformers.

Commander GPI Board **500-10-00**
28 Inputs / 24 Outputs 6 Tone Generators Monitoring Selector

Commander GPI Board Rear Connector Unit **500-14-00**

Commander Inter-System Networking Board **500-25-00**
6 channel networking between matrices.

Commander Inter-System Network Board Rear Connector Unit **500-26-00** with RJ45 and BNC connector

Orator Matrix

Orator 18 x 18 matrix 2RU including psu   **450-00-00**

18 x 18 port expansion card **450-01-00**

Redundant psu **450-02-00**

Inter system networking card **450-10-00**
6 channel networking between matrices with RJ45 connector

Panels

All panels include fixed gooseneck or internal microphone and loudspeaker with level control. RJ45 connector to Commander or Orator matrix.

1 button desktop panel Bluebox **440-00-00**

8 Lever Key LCD desktop panel **500-41-60**

 8 Button VFD Panel 1RU **500-45-00**

10 Button LCD Panel 1RU **500-46-00**

10 key LED Panel 1RU **500-42-50**

16 Lever Key LCD Panel 2RU **500-31-60**

16 Lever Key LCD Panel with Dial Keypad 2RU **500-31-51**

24 Lever Key LCD Panel 2RU **500-30-50**

32 Lever Key VFD Panel 2RU **500-33-00**

Dual Channel Telephone Interface with Integral Digital Hybrid 1RU **500-19-54.** Connects two analogue telephone lines. Includes DTMF dialling and auto answer facility. 1RU frame including power supply unit

Software

Pathfinder Configuration Software for Commander Systems **500-96-01**

Pathfinder Lite Configuration Software for Orator systems **450-03-00**

Rapide On-Line Upgrade for Pathfinder **500-96-03**

Rapide On-Line Upgrade for Pathfinder Lite **450-04-00**