

Gangway¹⁶

9Pin Gang Roll Router



User Manual



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Introduction

The Gangway16 is a 16-port “gang roll” router for RS-422 decks. This allows you to control up to 16 decks or video servers from one 9-pin controller.

The unit has 22 illuminated pushbutton switches to configure and show the port routing.

Connections include two 9-pin D-Sub connectors for controllers (1 on the rear panel, 1 on the front panel) and 16 9-pin D-Sub connectors for devices such as VTR decks, video servers and switchers.

The unit can be powered from the supplied power adaptor or powered from 9-12 volts DC.

Installation

Unpacking

When you receive your Gangway16, you should receive the following items:

- Gangway16
- This Users Manual
- 9 volt DC power supply

Please take a moment to register your product at:

<http://www.jlcooper.com>

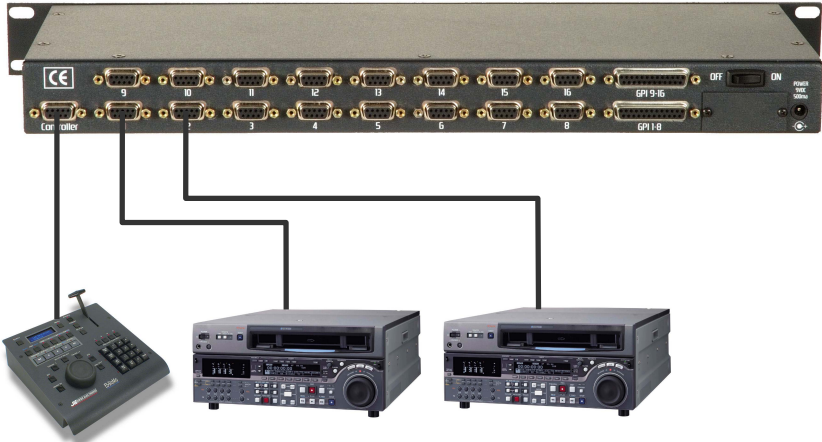
This will allow us to notify you of important updates and changes.

Setup

The Gangway16's compact 1U rack mount design makes it easy to locate wherever you need it. The Gangway16 must be setup up in a location that does not experience vibration, excessive humidity, dust or temperature extremes. The Gangway16 can be mounted in any orientation.

Connecting the Gangway16

Connecting the Gangway16 is quite straightforward. The Gangway16 typically connects between one or two controller(s) and up to 16 slave devices as shown in the following diagram.



Connect your deck controller into the Controller port on the rear panel. Alternately, your deck controller can be plugged into the Controller port on the front panel if it is more convenient. In this case, make sure the front panel Enable button is illuminated.

Connect your slave devices to the numbered ports on the rear panel. You can connect up to 16 slave devices to the Gangway16.

Using the Gangway16

The Gangway16 has 22 illuminated switches on the front panel to set and indicate the routing configuration of the Gangway16.

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These numbered switches allow the user to enable a slave device connected to the corresponding numbered port on the rear panel. This allows commands from the controller port to be routed to the selected numbered port(s).

All

The All switch toggles between setting all numbered ports on or off. The All switch lights up when the All switch has been pressed to select all the slave devices. The All switch will extinguish when the All switch has been pressed again to deselect all the slave devices or one of the numbered switches has been pressed.

Tally Select

The Tally Select switch allows you to route Tally messages (device status and responses) back to the controller. Pressing this button allows you to use the numbered buttons to select the slave device that returns tally messages back to the controller. Only one slave device at a time can return tally back to the controller.

Group Select

The Group Select switches allow you to save and recall prestored configurations in nonvolatile memory. These settings are retained after the power has been switched off to the unit.

To save the state current front panel configuration, press and hold the desired Group Select (1, 2 or 3). The numbered switches will briefly blink to indicate that the routing configuration has been stored.

To recall a configuration, merely press one of the Group Select (1, 2 or 3) buttons. The front panel will instantly update with the

selected configuration and illuminate the selected Group Select button.

Notes:

The Group Select buttons are disabled when the Tally Select is lit.

The state of the Front Panel Enable LED is not stored.

The All button is turned off.

Enable

The Enable button selects the front panel controller port. If the Enable button is illuminated, the Gangway16 uses the front panel controller port. If the Enable button is extinguished, the Gangway16 uses the rear panel controller port.

Technical Reference

Serial Port Interface

The pinout of the serial ports is listed in the table below.

Pin	Slave Devices	Controller
1	Ground	Ground
2	Receive A	Transmit A
3	Transmit B	Receive B
4	Ground	Ground
5	Not connected	Not connected
6	Ground	Ground
7	Receive B	Transmit B
8	Transmit A	Receive A
9	Ground	Ground

RS-422 Pinout

GPI Input

The Gangway16 has 16 General Purpose Interface inputs and 16 General Purpose Interface outputs.

The inputs can be used to sense external signals such as tallies and alarms. These pins are a CMOS input. The input signal must be limited to between 0 and 5 volts referenced to ground. This input is pulled up to +5 volts with an internal pullup resistor. This makes it compatible with dry relay contacts, optoisolators and open collector outputs.

The outputs can be used to trigger external devices such as indicators and alarms. These pins are a CMOS outputs. The outputs must be limited to between 0 and 5 volts referenced to ground.

The pinout of the GPI ports is listed in the table on the following page.

Pin	GPI 1-8	GPI 9-16
1	Input 4	Input 12
2	Input 3	Input 11
3	Input 2	Input 10
4	Input 1	Input 9
5	Ground	Ground
6	Ground	Ground
7	+ 5 Volts	+ 5 Volts
8	Ground	Ground
9	Ground	Ground
10	Output 8	Output 16
11	Output 5	Output 13
12	Output 3	Output 11
13	Output 1	Output 9
14	Input 5	Input 13
15	Input 6	Input 14
16	Input 7	Input 15
17	Input 8	Input 16
18	Ground	Ground
19	Ground	Ground
20	Ground	Ground
21	Ground	Ground
22	Output 7	Output 15
23	Output 6	Output 14
24	Output 4	Output 12
25	Output 2	Output 10

GPI Pinout

Power

The Gangway16 requires a 9-12 volt DC power supply capable of delivering at the minimum, 0.5 amps. The unit comes with a power supply (JLCooper part number PSDC117). If you need a power supply specific to your location, please contact your local distributor or JLCooper Electronics.

Warning: Using a power supply other than, the unit specified could result in damage to the Gangway16 and/or other equipment, which is not covered by the JLCooper Factory Warranty.

Troubleshooting

If for some reason the Gangway16 does not give you the expected results, take a moment to do some investigating. The most important concept is that you have your Gangway16 connected properly as outlined in *Installation and Use*. Take a moment to double check your setup.

A common problem is forgetting to turn the power switch on or turning the unit on after the software application has launched.

In addition, the JLCooper website (www.jlcooper.com) will contain current information on drivers, applications and troubleshooting.

Below are listed some possible issues and solutions.

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If all else fails, you can contact the JLCooper Service Department at: service@jlcooper.com.

Care and Service

If properly cared for, your Gangway16 should provide years of troublefree performance. While the Gangway16 is built in a rugged enclosure, please avoid dropping the Gangway16.

Clean with a soft, damp cloth. Do not allow liquids, dust or other foreign matter to get inside the unit.

There are no user-serviceable parts in the Gangway16. Please refer to the JLCooper Electronics Limited Factory Warranty on the following page for detailed warranty and service information.

JLCooper Electronics Limited Factory Warranty

JLCooper Electronics ("JLCooper") warrants this product to be free of defects in materials or workmanship for a period of 12 months from the date of purchase. This warranty is non-transferable and the benefits apply only to the original owner. Proof of purchase in the form of an itemized sales receipt is required for warranty coverage. To receive service under this warranty, customers in the United States should contact the JLCooper factory at (310) 322-9990 and talk to a service technician. If necessary, a Return Authorization number may be issued. For our customers outside the United States, it is recommended that you first contact your Dealer or Distributor, since they may offer their own service or support policy. If local support is not obtainable, please send a FAX to JLCooper's Service Department at +1 310 335 0110 with a detailed description of the service required. Upon issuance of return authorization, the product should be packed in the original shipping materials and shipped prepaid and insured to: Service Department, JLCooper Electronics, 142 Arena Street, El Segundo, CA 90245. Please include the following: copy of the sales receipt, your name and address (no P.O. Boxes, please), a brief description of the problem, and any other related items discussed with the service department and considered necessary to evaluate the product or effect a repair. The return authorization number must be clearly written on the outside of the package. JLCooper will at its option, without charge for parts or labor, either repair or replace the defective part(s) or unit. Shipping costs are not covered by this warranty. JLCooper's normal repair turn around time at the factory is approximately 15 business days from receipt of product to shipping. Your actual turn around time will include return shipping. Actual turn around time will vary depending upon many factors including the repeatability of the customer's reported complaint, the availability of parts required for repair, the availability of related products needed to evaluate the product if necessary. Priority services are available at additional cost. These should be discussed with the service technician at the time the return authorization is issued. This warranty provides only the benefits specified and does not cover defects or repairs needed as result of acts beyond the control of JLCooper including but not limited to: abuse, damage by accident/negligence, damage from using incorrect power supply, modification, alteration, improper use, unauthorized servicing, tampering, or failure to operate in accordance with the procedures outlined in the owner's manual; nor for natural or man-made events such as, but not limited to flooding, lightning, tornadoes, earthquakes, fire, civil unrest, war, terrorism, etc.

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