

## LBB 5843/01 Coupler Head



The LBB 5843/01 coupler head is used in DP6000 paging systems as an interface between the LBB 5800 paging desk, or an Alpha Server (LBB 6000/50) and a number of contact inputs. When a input contact is activated, a preprogrammed paging call is transmitted to a receiver. Each coupler head has two relay outputs which may be programmed to fulfill various functions.

**Note** See the LBB 6501/00 datasheet for more information on multipurpose coupler software functions of an alphadesk.

### Functions

Up to 32 contacts can be connected to the connection blocks on the PCB of each coupler head. The paging calls are activated by operating the contacts. The connected contacts may either be open/closed constantly, or may open/close just for a moment (pulse contact). The input circuit has optocouplers which react to a 10 mA current loop. The loop current for the input circuits may be supplied either internally from the power supply connected to the coupler head, or by a separate external power supply if complete galvanic separation is required. The coupler head is connected to the desk LBB 5800 via the RS485 input. Up to 31 units can be connected to this input. Up to 31 coupler heads may be connected, and consequently  $31 \times 32 = 992$  contact inputs and  $32 \times 2 = 64$  relay outputs may be programmed. If the coupler heads are connected to the alphadesk, a maximum of 31 coupler heads may be connected to the RS485 port of this desk.

- 32 contact inputs
- Input circuit with optocouplers
- Two relay outputs
- Programmable multipurpose coupling functions
- Managing up to 31 coupler heads per desk

### Multipurpose coupler software functions of the LBB 5800 desk

Each contact input may be programmed to be a call input, presence input or a reset input for a paging call, or to start the re-route function. Moreover, it may be programmed as control input for one or more of the relay outputs. An input assigned as call input can be programmed to feature the following functions:

- A defined call with numeric and/or alphanumeric information is transmitted to a pager. This call can be repeated either until a reset is given, or up to 250 times if a reset is not given. The repeat time between the calls can be programmed to be between 10 and 250 seconds.
- A defined call with numeric and/or alphanumeric information is transmitted with a preprogrammed maximum number of repeats. If a reaction (by activating a presence contact) is not given to this call before the maximum number of repeats has been transmitted, an assistance call will be transmitted to another preprogrammed pager address with the same numeric information. This call will also be repeated either a maximum number of times or until the presence contact is activated. If the call contact is activated again while the presence contact is active, the assistance call will be transmitted immediately and will be repeated until the presence contact is activated again.
- A call function possible (identical to the one mentioned above, except that now a group call is transmitted to the decimal group of the first call address, if no reaction is given to the assistance call. This group call

will be repeated until the presence contact is activated. If the call contact is activated once more while the presence contact is still active, then either the assistance call or the group call will be transmitted, depending on the kind of call on which the presence contact was given. If the group call has been repeated the same number of times as is programmed for the assistance call, a relay may be activated on one of the coupler heads. This relay is the same for all calls that are programmed.

- A “delay-time” can be programmed to hold the first call between 0 and 25 seconds after the contact is activated.

### Call rerouting

All assigned contact inputs can be rerouted to one specific pager address. This can be initiated by:

- the LBB 5800 desk (via editor)
- by the real time clock in the desk
- by one or more of the contact inputs of the multi-purpose coupler heads

### Contact monitoring

The desk display can monitor the contact inputs and relay outputs, with or without an audio warning signal. The contact numbers that have been assigned as call inputs will be displayed.

### Relay output

The two relay outputs available on each coupler head can be activated by:

- one of the remote contact calls from the desk
- one of the direct calls from the desk
- a defined paging string on the data lines or talk back lines
- a contact input on the coupler heads
- a group call transmitting a predefined number of times and no reset or presence command is given in the call cycle of the multi-purpose coupler software
- lost communication with the desk (in this case, the relay should be energized in the stand-by status)

### Monitoring

The desk constantly checks whether communication with the assigned coupler heads is still possible, and indicates an error with a bleep. A paging call may be coupled to this alert.

### Controls and Indicators

- Error display
- Audio bleep for warnings and errors Interconnections
- RS485 connection to control desk

### Certifications and Approvals

Region	Certification
Europe	CE
CE marking	acc. to Telecom directive 1999/5/EC
Safety:	acc. to IEC/EN 60950-1
EMC	acc. to EN61000-6-1 acc. to EN61000-6-3
Telecom	acc. to ETSI EN 300 224-2
ESD	acc. to EN61000-4-2 contact: 8 kV air: 15 kV
Bump	acc. to IEC60068-2-29
Vibration	acc. to IEC60068-2-6

### Technical Specifications

#### Electrical

Power source	12 VDC ±10%
Current consumption	400 mA max.
Contact loop current	7 to 60 mA
Max. switching capacity	
relay contacts	35 V, 1 A DC with resistive load
Galvanic separation	
input circuits	max. 4 kV
Galvanic separation	
input circuits	max. 500 V

#### Mechanical

Dimensions (H x W x D)	81.5 x 270 x 195 mm
Weight	1 kg
Material	ABS
Mounting	Wall
Color	Light grey

#### Environmental

Operating temperature	-20 °C to +55 °C
Storage temperature	-40 °C to +70 °C
Relative humidity	10 to 95%

### Ordering Information

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managing up to 31 coupler heads per desk