

1. DCU30 and DCU20 difference

Size
The size of DCU30 is smaller then DCU20. Use the converting plate to make DCU30 to fit in the old DCU20 place.
Key switch
DCU30 can not have any Key svitch. All 16 push buttons are of same type. The Key function must be solved in application program AMPL.

## Connection

Cable connection is the same for DCU30 and DCU20 (One 17 pin and one 14 pin Canon). Address selection for DCU30 can be made in 2 ways. The same way as for DCU20 (Strapping inside the Canon plug) or with the DIP switch inside the DCU30. If DIP switch setting is not used then all DIP switches 1-8 must be set to Off (Factory setting is off).

## Text strings

Text strings stored in DCU is Standard English if other not specified.
Give the Part number of old DCU20 (Label on back side of DCU20) then Same text strings will be programmed in DCU30 as the old DCU20.

## Text stripes for Pushbuttons

Customer must specify text and colour on Pushbuttons. If no specification then DCU30 will be delivered without text stripes for pushbuttons.

DCU30


DCU20



## 2. TECHNICAL DESCRIPTION DCU30

### 2.1 Dimension and mounting

To obtain the best immunity to electric noise the DCU30 front panel must be electrically connected to the control desk panel through the fix screws in each corner. Use nuts that make scratches in the paint of the backside of the panel. All parts of the control desk must be electrically connected to each other.




Front size: $178 \times 204$ (w x h)
Cut out size: $153 \times 179$
Screw pos :160.4 x 185.8
Drill hole diam: 5.5
Required mounting deep: 230

### 2.2 Strapping

The address of the DCU30 is made with jumpers in connector X1 or dipswitches at the connector board.

| BUS ADDRESS | JUMPERS | DIP SWITCHES |
| :---: | :--- | :--- |
| 0 |  |  |
| 1 | K-L | 1 |
| 2 | K-M | 2 |
| 3 | K-L-M | 1,2 |
| 4 | K-N | 3 |
| 5 | K-L-N | 1,3 |
| 6 | K-M-N | 2,3 |
| 7 | K-L-M-N | $1,2,3$ |
| 8 | K-P | 4 |
| 9 | K-L-P | 1,4 |
| 10 | K-M-P | 2,4 |
| 11 | K-L-M-P | $1,2,4$ |
| 12 | K-N-P | 3,4 |
| 13 | K-L-N-P | $1,3,4$ |
| 14 | K-M-N-P | $2,3,4$ |
| 15 | K-L-M-N-P | $1,2,3,4$ |
| BUS | JUMPERS | DIP SWITCHES |
| 1 | K-R | 5 |
| 2 | K-S | 6 |
| 3 | K-R-S | 5,6 |
| 4 | K-T | 7 |

## TERMINATION

When the unit is the last one on the bus, the bus must be terminated by a connection between K and $B, L$ and $D, M$ and $F$ in connector X 2 or by 3 jumpers on connector board.


### 2.3 Change of display brightness

It is possible to adjust the brightness of the display.

1. Give the order lamp test to DCU30.
2. Change brightness with push button 14 and 15

### 2.4 Connections

X1
17 pins connector of CANON make type CA 3102E20-29P-B-F80 to connect supply,bus and strapping. Cable contact CA 3106E20-29S-B-F80
X2
14 pins connector of CANON make type CA 3102E20-27P-B-F80 to connect supply,bus and termination.
Cable contact CA 3106E20-27S-B-F80

| X1 |  | Transmission speed |  |
| :---: | :---: | :---: | :---: |
|  |  | 375kbits | 2 mbits |
| PIN |  |  |  |
| A | SC | X | X |
| B | DATA | X | X |
| C | DATA-N | X | X |
| D | CLOCK |  | X |
| E | CLOCK-N |  | X |
| F | R | X | X |
| G | R-N | X | X |
| H | +24V | X | X |
| J | OV | X | X |
| K | Bus address see strappings |  |  |
| L | Bus address |  |  |
| M | " |  |  |
| N | " |  |  |
| P | " |  |  |
| R | Bus no see strappings |  |  |
| S |  |  |  |
| T | " |  |  |
| X2 |  | Transmission speed |  |
|  |  | 375kbits | 2 mbits |
| PIN |  |  |  |
| A | SC | $X$ | X |
| B | DATA | X | X |
| C | DATA-N | X | X |
| D | CLOCK |  | X |
| E | CLOCK-N |  | X |
| F | R | $X$ | X |
| G | R-N | X | X |
| H | +24V | X | X |
| 1 O |  |  |  |
| J | OV | X | X |
| K | Termination see Strappings |  |  |
| L |  |  |  |
| M | " |  |  |
| N |  |  |  |

