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servor3

broncolor® servor3

Bedienungsanleitung
Operating Instructions
Mode d'emploi
Istruzioni per l'uso
Manual de Instrucciones
オペレーションガイド



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broncolor
The Light

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Operating and function elements

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- broncolor server 3 is an infrared remote control unit. It is used to control the broncolor power packs Pulso 2/4/8, Pulso A2/A4, the power packs 404/606 server and to control the drive motors for the ceiling rail trolleys and lampheads.
- broncolor server 3 combined with the Sinar digital shutter system allows controlling the power packs in tune with the required volume of light. As a result, automatic lighting control in large format is also feasible.
- broncolor server 3 is equipped with a microprocessor. This allows a number of operations which are described step by step in the following. Using the main operating keys 13/15/16, several various operating modes can be selected. These operating modes are shown by symbols or characters via the LCD display.
- For a remote control of the Pulso power packs with server 3, the Pulso 2/4/8 power packs must be equipped with the MEMORY program no. 1.11.

1. Start up

After loading two 9V batteries (type 6 LR61 E BLOCK. 6AM6) the server 3 remote control is ready to operate. Activate the unit by pressing key "on" (14). The display panel for a brief moment shows all characters and numbers available to the display. Approx. 50 s after the last operation, the unit automatically shuts off. All information is always stored. A short beep acknowledges the operation of a key.

2. Operating mode "unit" power pack (13)

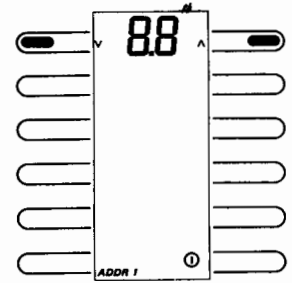
This mode displays the characters as symbols on the LCD display similar to the front panel of the power packs Pulso 2/4/8, Pulso A2/A4 (see also item 2.6).

By pressing the "unit" key (13) for approx. 25 s, stored information for all power packs may be deleted.

2.1 Flash energy (1, 2)

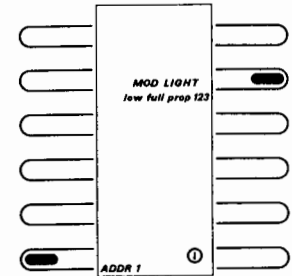
By pressing the keys 1 or 2 "+" and "-", the energy of the flash may be selected in the range of 4 or 6 stops respectively stops from 50-10 respectively 40-10. Short pressing for 1/10 stop steps, extended pressing for 1/4 stop steps.

Depending on the type of unit programmed (see also chapter 4), the display for key 3 shows the code P2, P4, P8 or A2, A4 respectively. At the same time the proportionality stage of the modelling light is adapted.



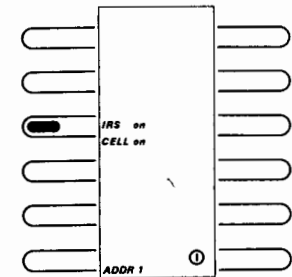
2.2 Modelling light "MOD LIGHT" (4)

Activate modelling light by pressing key 4, extended pressing on/of. Use the same key to select the intensified proportionality step "low", "full", "prop 1", "prop 2", "prop 3" by pressing it briefly.



2.3 IRS/Photocell (5)

Press key 5 to activate the IRS receiver "IRS on" or activate/deactivate photocell "CELL on".



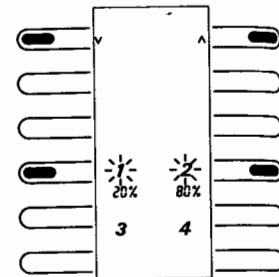
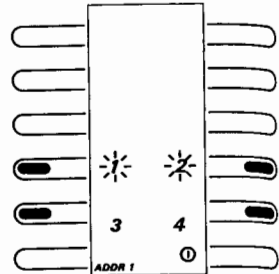
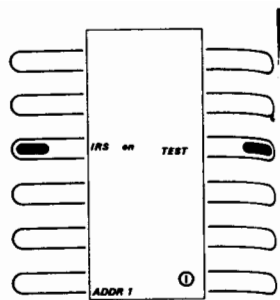
2.4 Test flash (6)

Release a flash by pressing key 6. In order to release a flash, IRS must be activated. "**IRS on**". If **IRS** is not activated, **TEST** and **IRS** will flash for approx. 3 s.

2.5 Lamphead-connectors on/off (7-10)

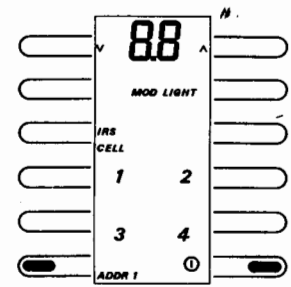
Press keys 7, 8, 9, 10 to activate/deactivate the lampheads (1-4) connected, an asterisk will be displayed around the selected number. If the connector is not occupied, the power pack will sound an acoustical signal.

For the Pulso A units, individual output distribution is displayed below the digits * , * in per cent. Pressing key 9/10 for an extended period results in a change of the display image, whereupon the percentage of energy distribution per lamphead can be changed. This range of percentage distribution is a function of the number of lampheads powered up.



2.6 Power pack on/off (12)

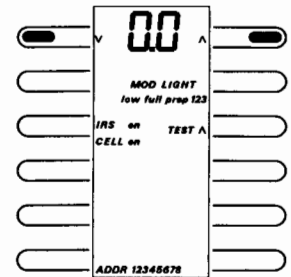
Press key 11 to select address and activate/deactivate power pack by pressing key 12. In the off mode, the display panel will show "**TEST**", the symbol ① and "**ADDR**" as well as the number of the power pack. The remaining displays fade out.



2.7 Operating mode "all power pack addresses" (11)

In the operating mode "all power packs", "all" for short, the commands of the main function are transferred simultaneously from the server 3 to all programmed power pack addresses in operation. Press key 11 for a long time. The display shows the figures **123** ... In this operating mode, the functions can be performed simultaneously for all power packs (power pack functions only). Instead of the energy display, the remaining part of the control range is shown.

As long as key 11 stays pressed, the display with the "+" or "-" sign for the remaining area are



shown alternatively, plus the power pack functions. After releasing key 11, the intensity in the range selected may be modified. When this range is exceeded in the + or - direction, the digit display will flash.

Example:

Power pack A energy setting **60**
 Power pack B energy setting **10**
 Remaining range ± 00

Example:

Power pack A energy setting **90**
 Power pack B energy setting **80**
 Remaining range $+ 10/- 20$

By briefly pressing key 1, 2, energy may be modified by $\frac{1}{10}$ stop steps, by extended pressing by $\frac{1}{4}$ stop steps. When being in the highest level extended pressing of key 2 sets all power packs to maximum energy 10.

If specific displays flash in this operating mode, it means that such functions are not identical on all units. For example, "MOD. LIGHT" flashing means that the modelling light is activated on some power packs, on others, it is off. Use the relevant function key to set them to an identical position.

If the addresses "ADDR" 123... flash, various types of units such as Pulso and 404 server are programmed. Under such conditions, the operating mode "all" cannot be used.

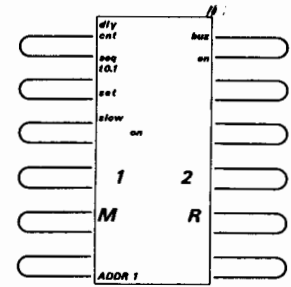
In the operating mode "all", the lampheads cannot be activated or deactivated. All remaining functions are operating at the same time. Deactivated power pack addresses are missing in the display "all".

3. Auxiliary functions (15)

Activate the operating mode auxiliary functions by pressing the "aux" key.

In this operating mode, the auxiliary functions for each individual power pack may be set separately. Following this, convert to the power pack using the key "unit".

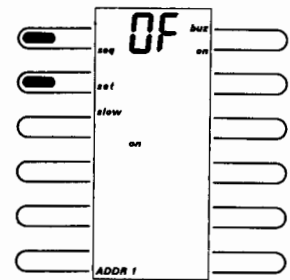
The displays of the auxiliary functions are shown in the same sequence as on the control panels of the Pulso A power packs. "seq", "dly", "t 0.1", "cnt".



3.1 Function "seq" (1, 3)

Multiflash release (sequence).

Activate "seq" by pressing key 1 ("seq" flashes). Set the number of intended flashes using key 3. Short pressing changes setting by 1 flash, extended pressing by 10 flashes. Maximum setting: 51 flashes. After expiration of the flash sequence, reset function "seq" by pressing the key "set".



3.2 Function "dly" (1, 3)

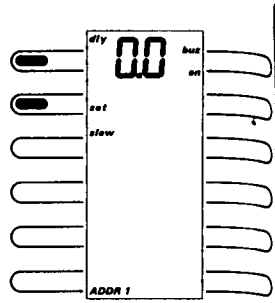
The shortest time setting for delayed flash release for Pulso A power packs goes to hundredths of seconds. The remote control server 3 only allows setting of tenths of seconds.

Delayed flash release.

Activate "dly" by pressing key 1 ("dly" flashes). Set intended delay period using key 3 "set". A short pressing of the key sets the period by $\frac{1}{10}$ s, extended pressing by $\frac{1}{4}$ s. Maximum delay period 9.9 s.

After a release of the delayed flash, the function "dly" can be reactivated by pressing the key "set".

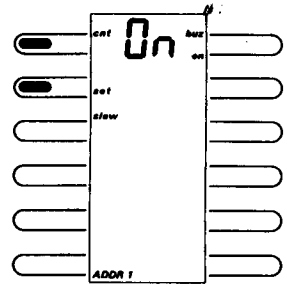
Since the functions "dly + seq" are interdependent, the server 3 display only shows the shortest possible time permissible for the preset power pack energy.



3.4 Function "cnt" (1, 3)

Flash counter.

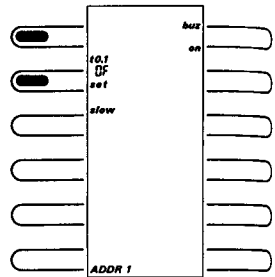
Activate "cnt" by pressing key 1 ("cnt" flashes). The flashes now following are counted and displayed at the power pack. This display is not shown on the server 2. After expiration of the intended flash series, use key "set" (3) on the server 2 to reset the counter.



3.3 Function "t 0.1" (1, 3)

The function "t 0.1" (shortened flash duration) can be activated only with symmetrical operation on the main connectors 1/2 of the Pulso A power packs. Power up t 0.1 using key (1). Set flash duration with key (3). Only those times are possible which are permissible under the preset power pack energy.

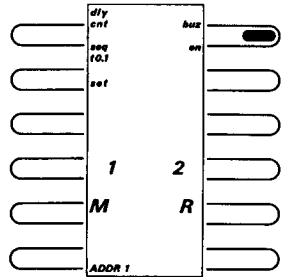
If, however, a time is programmed, the power pack energy can be changed to a limited extent only. Delete the time entry setting key 3 to t 0.1 DF.



3.5 Standby display "buz" (2)

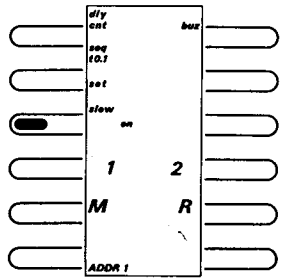
Acoustical standby signal in the power pack (buzzer).

Press key 2 to activate/deactivate the "buz" signal. The alarm for false manipulation will remain active even with the buzzer deactivated.



3.6 Slow charge "slow" (5)

Slow charging of the power pack with weak mains fuse. Activate/deactivate "slow" using key 5.

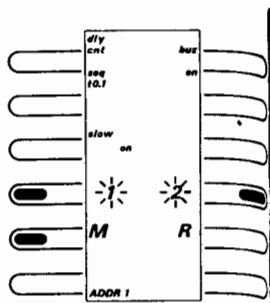


3.7 Storage "M", "1", "2" (7, 8, 9)

Keys 7, 8, 9 allow storing a selected power pack setting so that such settings can be repeated at any other time.

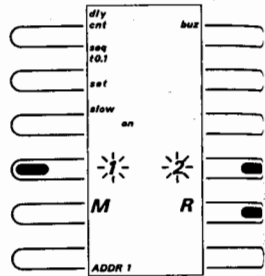
Press key 9 "M" followed by pressing key 7. An asterisk will flash around the number 1 (memory 1). The setting of all power packs operating is stored in memory 1. Following this, a second lighting situation may be set. This setting may be stored as described in memory 2. An "M" is now displayed in the function "unit" and shows that a setting has been stored.

Deleting both memories is feasible only in common. Press key 9 "M" until the flashing asterisk around the number 1 and 2 deletes.



3.8 Calling the memories "R", "1", "2" (7, 8, 10)

Press key 10 "R", followed by pressing the intended memory 1, 2 by the corresponding key 7, 8.

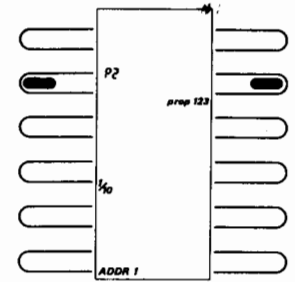


4. Programming

Pressing key 15 "aux" for approx. 25 s allows to enter into the programming level.

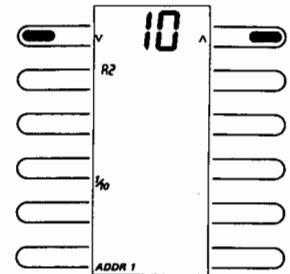
The energy display shows the minimum energy feasible for the power pack selected. Using the keys 1, 2, this setting may be adapted accordingly to the relevant power pack, e. g. for Pulso or for 404 server.

Select type of power pack P2/4/8, A2/4 with key 3, old units 404/406 server. The display on server 3 changes in accordance with the power pack options.



4.1 Display of flash energy 1/10, 1/3 stops

For the Pulso A power packs, energy graduation can be programmed in such a way that identical numbers in the output display correspond to the identical flash energy. To this end, set the power pack Pulso A2 to the 9-3 range and the power pack Pulso A4 to the 10-4 range. Set the maximum value 9 or 10 as the case may be.

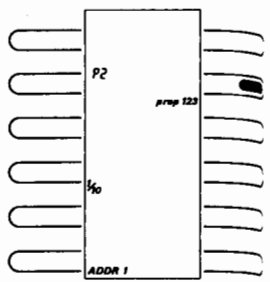
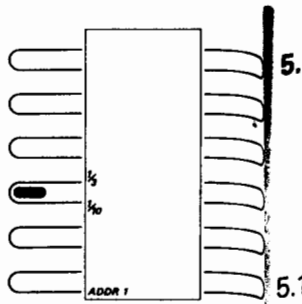


4.2 **Programming the display type $\frac{1}{10}$, $\frac{1}{3}$ stop steps**

Program the intended display $\frac{1}{10}$, $\frac{1}{3}$ by pressing key 7.
At $\frac{1}{3}$ stop, the energy display changes to whole numbers.

4.3 **Programming the modelling light**

Set intended proportionality step **prop 1**, **prop 2**, **prop 3** by pressing key 4. This setting depends on the power pack types Pulso 2/4/8. For 404 and 606 servos, only the setting **prop** without an additional number may be selected.
Energy display, modelling light behavior and output steps $\frac{1}{10}$, $\frac{1}{3}$ are interconnected so that only function command combinations may be set, an action for which the power pack is provided.

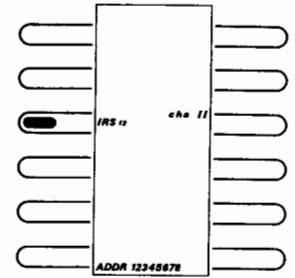


5. **IRS 1-2 and Studio Channel I+II**

Press briefly the key "aux" from the programming step described under 4. The display panel shows **IRS 1,2** and **Studio Channel I, II**.

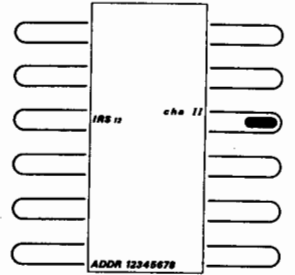
5.1 **IRS Channel 1/2**

Set **IRS Channel 1** or **2** by pressing key 5. Once the channel is determined the same channel has to be set at the power pack.



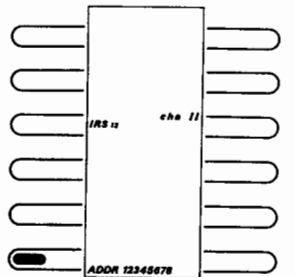
5.2 **Studio Channel I/II**

Set intended channel "cha" I, II by pressing key 6. As under 5.1, once the channel is determined it has to be set at the power pack as well.



5.3 **Programming the number of power pack addresses 1-8**

Set the intended number of power packs from a position as described under 5. Following this, switch back to power pack display by pressing the "unit" key.

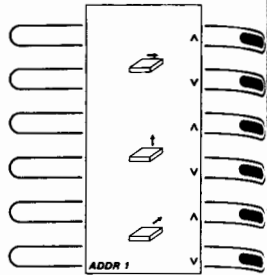


6. Mechanical functions

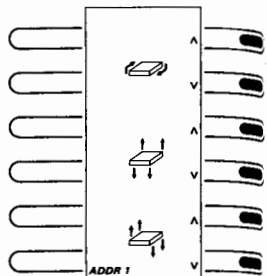
Press the key "mec" (16) to display the symbol for the mechanical operating functions for the ceiling rail and lamphed motors.

6.1 Press "mec" (16) key.

The symbols of a panel light with the arrows in the direction of motion are shown in the display. Use the keys 2-12 to operate the direction of motion according to the arrow symbols.



6.2 By pressing the "mec" (16) key once again, the display can be changed to three additional symbols for the same address. For each address, 2x3 symbols with 6 double functions are available.



6.3 Under item 7 "Programming the mechanical functions", the adjustment, e.g., of the rope length of ceiling rail motors can also be adjusted.

7. Programming the mechanical functions

server 3 functions with the mechanical infrared receiver to megalite. The kind of display, however, can be adapted to the functions of the server 2 receiver.

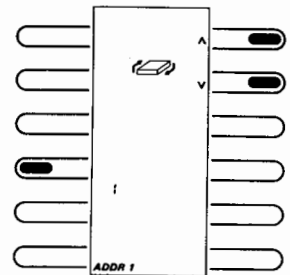
7.1 Programming for server 2 receiver

Switch to mechanical display by pressing the "mec" key. Keep "mec" key pressed for approx. 3 seconds. Display changes. One of the numbers is shown in the display next to key 7.

Use key 7 (keep it pressed for approx. 25 seconds to select program 1,2,3 .

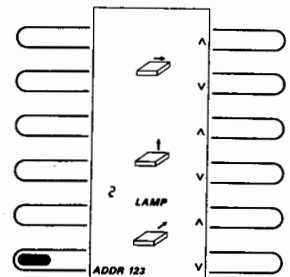
Then switch back to operating function by pressing the "mec" key again.

Program 1 corresponds to the description under 6.1, 6.2.

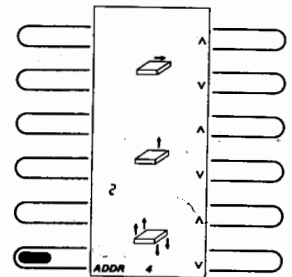


7.2 Program "mec 2"

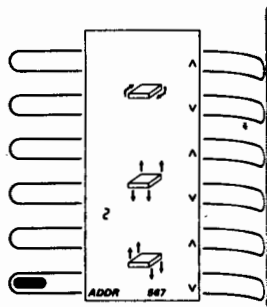
In program 2, the addresses 1, 2, 3 for three identical symbols are shown.



7.3 The display of address 4 differs by the lowermost symbol.



7.4 Switch to addresses 5–8 by pressing the "mec" key. Addresses 5, 6, 7 show the identical display.



9.1 Preparing the measuring instrument

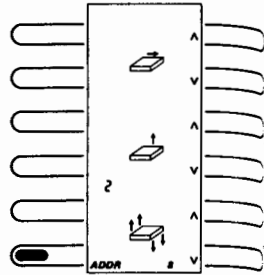
Connect servor 3 with connector cable to the Sinar interface (17).

9.2 Setting the power pack

Setting the flash intensity depends on the shooting situations. Once set, such values are stored. The measuring action is now performed on the basis of the Sinar instructions.

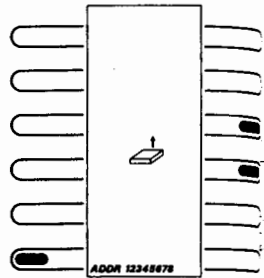
For this operating mode the Pulso power packs have to be equipped with MEMORY programm no. 1.11.

7.5 Address 8 shows a display for operating lampheads with additional functions.



8. Program "mec 3"

8.1 The operation of lampheads with the direction motion motorized only in the vertical, is shown in program "mec 3" for the sake of clarity. Each address shows only the central lamphead symbol.



9. Exposure control using servor 3

servor 3 combined with the Sinar measuring system allows an automatic light intensity control and thus the automatic exposure control for large format.

10. Technical Data

Hand-held transmitter operating	Pulso A2/A4, Pulso 2, 4, 8 and 404/606 servor
Number of addressable receivers per work station	8 power packs and 8 lampheads of 6 motors each
Number of work situations in one room	2
Remote control functions	<ul style="list-style-type: none"> - output control - modelling light mode and on/off - lampheads on/off (singly) - photocell, IRS receiver on/off - auxiliary functions, asymmetry, time t 0.1 - slow charge - test - power pack on/off - mechanical motion of lampheads
Storage option	2 lighting settings, may be called individually
External connection	for automatic operation with Sinar lighting module
Power supply	2 batteries 9V, type IEC LR61, 6AM6
Dimensions	185 x 75 x 40 mm
Weight	340 g

11. Short instruction

Example of programming and setting of several power packs of different types and different energy

1. Check for power pack functions
 - 1.1 activate servor 3 by pressing key "on"
 - 1.2 set address "ADDR 1" by pressing key 11
 - 1.3 activate power pack by pressing key 12
 - 1.4 choose desired energy by pressing key 1 and 2, e.g. 6.1
 - 1.5 activate/deactivate modelling light by extended pressing of key 4
 - 1.6 activate mode modelling light by shortly pressing key 4
 - 1.7 activate/deactivate IRS-receiver and/or photocell by pressing key 5
 - 1.8 activate lamp connections by pressing keys 7, 8, 9, 10; =on
 - 1.9 release flash by pressing key 6 "TEST" (if IRS is not "on", "TEST" will be blinking)
2. Short instruction for programming, e.g. 5 power packs of various types
 - 2.1 Preparation of power packs
set following programming at the power packs (note operating instruction)

<u>Power pack</u>			
Pulso 2:	address 1	studio channel I	IRS channel 1
Pulso 4:	address 2	studio channel I	IRS channel 1
Pulso 8:	address 3	studio channel I	IRS channel 1
404 servor:	address 4	studio channel I	-
Pulso A2:	address 5	studio channel I	IRS channel 1
 - 2.2 Programming the remote control servor 3
 - 2.3 activate servor 3 by pressing key "on"
 - 2.4 choose address 1 by pressing key 11
 - 2.5 activate power pack 1 by pressing key 12
 - 2.6 press key "aux" long (display changes to programming function)
 - 2.7 choose address by pressing key 11 and choose with key 3 the required type of power pack

P2	address 1:	prop 1	1/10	Pulso 2
P4	address 2:	prop 1	1/10	Pulso 4
P8	address 3:	prop 1	1/10	Pulso 8
OL	address 4:	prop -	1/3	404 Servor
A2	address 5:	prop 1	1/10	Pulso A2
 - 2.8 press key "aux" again, however shortly (display changes to IRS/cha)
 - 2.9 set addresses 1, 2, 3, 4, 5 by pressing key 11
 - 2.10 set IRS channel 1 by pressing key 5
 - 2.11 set studio channel I by pressing key 6
 - 2.12 switch back to power pack function by pressing key "unit".

Programming is terminated.