broncolor servor 2

Remote control unit

English

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Operating and function elements

1–12 Operating keys
13 Key **"unit"** power pack function
14 Activating key **"on"**
15 Key **"aux"** auxiliary functions
16 Key **"mec"** mechanical functions
17 Connection for lightmeter system

- broncolor servor 2 is an infrared remote control unit. It is used to control the broncolor power packs Pulso 2/4/8, the power packs 404/406 servor and to control the drive motors for the ceiling rail trolleys and lampheads.
- broncolor servor 2 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 servor 2 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 servor 2, the units must be equipped with the MEMORY program no. 1.11.

1. Start up

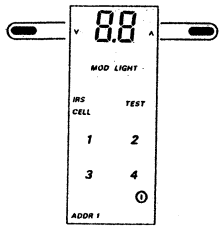
After loading two 9V batteries (type 6 LR61 E BLOCK. 6AM6) the servor 2 remote control is ready to operate. Activate the unit by pressing key **"on"** (14). The display panel for a brief moment shows all characters and numbers available to the display. Approx. 50 s after the last operation, the unit 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 (see also item 2.6).
By pressing the **"unit"** key (13) for approx. 5 s, stored information for all power packs may be deleted.

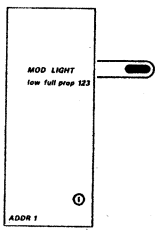
2.1 Flash energy (1, 2)

By pressing the keys 1 or 2 **"+"** and **"–"**, the energy of the flash may be selected in the range of 4 stops from *6.0–10*.
Short pressing for 1/10 stop steps, extended pressing for 1/1 stop steps.



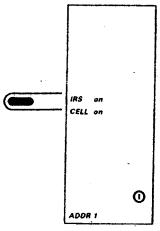
2.2 Modelling light *"MOD LIGHT"* (4)

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



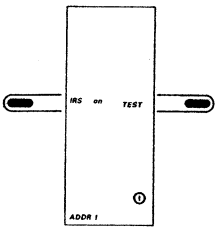
2.3 IRS/Photocell (5)

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

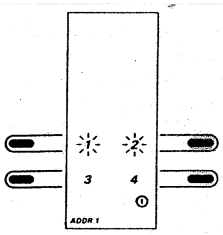


2.4 Test flash (6)

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.

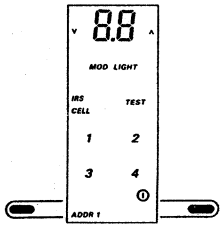


2.5 Lamphead-connectors on/off (7–10)



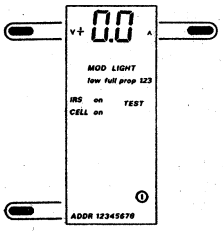
Press keys 7, 8, 9, 10 to activate/deactivate the lampheads ***(1–4)*** connected, an asterisk will be displayed around the selected number. If the connector is not occupied, the power pack will sound an acoustical signal.

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 ⏻ 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 servor 2 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 *6.0*
Power pack B energy setting *10*
Remaining range *±0.0*

Example:

Power pack A energy setting *9.0*
Power pack B energy setting *8.0*
Remaining range *+1.0/–2.0*

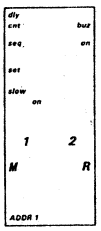
By briefly pressing key 1, 2, energy may be modified by $^1/_{10}$ stop steps, by extended pressing by $^1/_1$ stop steps. When being in the highest level extended pressing of key 2 sets all power packs to maximum energy 10.

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 servor are programmed. Under such conditions, the operating mode "all" cannot be used.

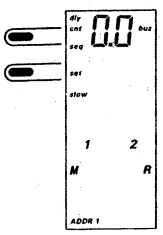
In the operating mode "all", the lampheads cannot be activated or deactivated. All remaining functions are operating at the same time. Deactivated power pack addresses are missing in the display "all".

3. Auxiliary functions (15)



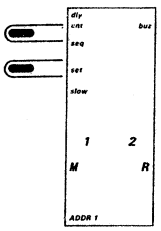
Activate the operating mode auxiliary functions by pressing the **"aux"** key.
In this operating mode, the auxiliary functions for each individual power pack may be set separately. Following this, convert to the power pack using the key **"unit"**.

3.1 Function *"dly"* (1, 3)



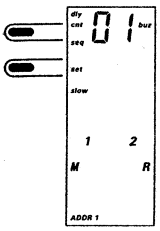
Delayed flash release.
Activate ***"dly"*** by pressing key 1 (***"dly"*** flashes).
Set intended delay period using key 3 ***"set"***. A short pressing of the key sets the period by $^1/_{10}$ s, extended pressing by $^1/_1$ s. Maximum delay period 9.9 s.
After a release of the delayed flash, the function ***"dly"*** can be reactivated by pressing the key ***"set"***.

3.2 Function *"cnt"* (1, 3)



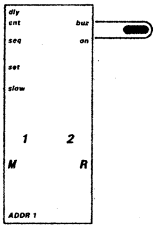
Flash counter.
Activate ***"cnt"*** by pressing key 1 (***"cnt"*** flashes).
The flashes now following are counted and displayed at the power pack. This display is not shown on the servor 2. After expiration of the intended flash series, use key ***"set"*** (3) on the servor 2 to reset the counter.

3.3 Function *"seq"* (1, 3)



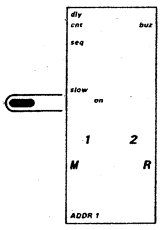
Multiflash release (sequence).
Activate ***"seq"*** by pressing key 1 (***"seq"*** flashes).
Set the number of intended flashes using key 3. Short pressing changes setting by 1 flash, extended pressing by 10 flashes. Maximum setting: 51 flashes. After expiration of the flash sequence, reset function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

3.4 Standby display *"buz"* (2)



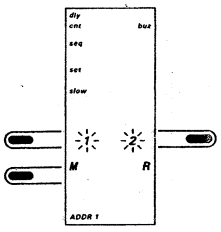
Acoustical standby signal in the power pack (buzzer).
Press key 2 to activate/deactivate the ***"buz"*** signal. The alarm for false manipulation will remain active even with the buzzer deactivated.

3.5 Slow charge *"slow"* (5)



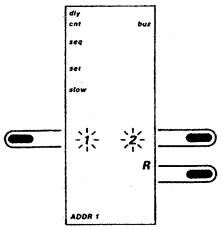
Slow charging of the power pack with weak mains fuse. Activate/ deactivate ***"slow"*** using key 5.

3.6 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.

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



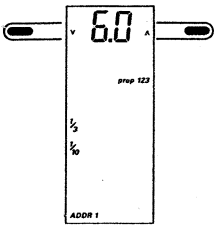
Press key 10 ***"R"***, followed by pressing the intended memory ***1, 2*** by the corresponding key 7, 8.

4. Programming

Pressing key 3 ***"aux"*** for approx. 3 s allows to enter into the programming level.

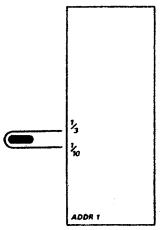
The energy display shows the minimum energy feasible for the power pack selected. Using the keys 1, 2, this setting may be adapted accordingly to the relevant power pack, e.g. ***6.0*** for Pulso or ***0*** for 404 servor.

4.1 Display of flash energy $^1/_{10}$, $^1/_3$



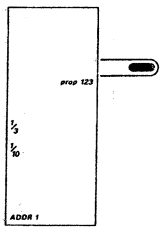
Keys 1 and 2 are used to program the minimum flash energy allowed for the relevant power pack. For example, ***6.0*** for Pulso 2/4/8 or ***0*** for 404/606 servor. This is required for a correct functioning of the remote control.

4.2 Programming the display type $^1/_{10}$, $^1/_3$ stop steps



Program the intended display $^1/_{10}$, $^1/_3$ by pressing key 7.

4.3 Programming the modelling light

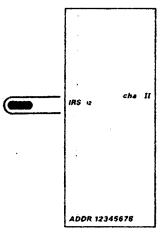


Set intended proportionality step ***prop 1, prop 2, prop 3*** by pressing key 4. This setting depends on the power pack types Pulso 2/4/8. For 404 and 606 servor, only the setting ***prop*** without an additional number may be selected.
Energy display, modelling light behavior and output steps $^1/_{10}$, $^1/_3$ 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

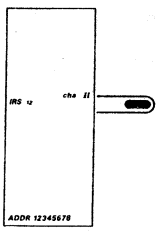
Press briefly the key **"aux"** from the programming step described under 4. The display panel shows ***IRS 1, 2*** and ***Studio Channel I, II.***

5.1 IRS Channel 1/2



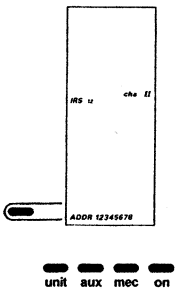
Set ***IRS Channel 1*** or ***2*** by pressing key 5. Once the channel is determined the same channel has to be set at the power pack.

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.

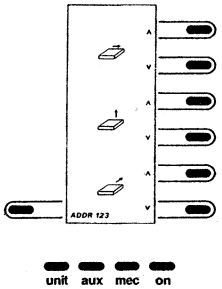
5.3 Programming the number of power pack addresses 1–8



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.

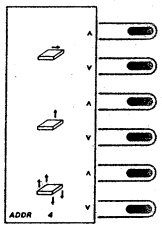
6. Mechanical functions

The mechanical functions of the ceiling rail and lamphead motors are remote controlled by pressing the **"mec"** key **(16).**

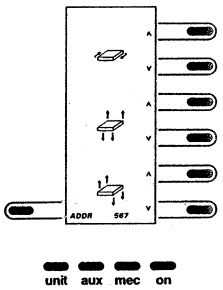


6.1 Press **"mec"** key (16). The symbols of a surface light are shown in the display. By pressing keys 2–12 on the righthand side of the servor, the direction of drive right/left, up/down, etc. may be operated in accordance with the arrow symbols.

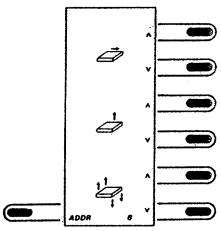
6.2 The first 3 addressed allow three equivalent double functions each. The fourth address in addition allows a rotating function as required for Cumulite single.



6.3 By again pressing the **"mec"** key, four more addresses with a corresponding number of functions may be operated.
In this function, 4 addresses from ***5–8*** are available for the rotating motion.



6.4 Addresses ***8*** and ***4*** are identical for the remote control of the Cumulite single.



The combination servor 2 and drive motors with receiver must be tuned during the installation process in such a way that the remote control signals are allocated to the relevant motors and/or that the motors are properly wired on the servor receiver.

Please refer to figures 6.1–6.4.

7. Exposure control using servor 2

servor 2 combined with the Sinar measuring system allows an automatic light intensity control and thus the automatic exposure control for large formats.

7.1 Preparing the measuring instrument

Connect servor 2 with connector cable to the Sinar interface (17).

7.2 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 power packs have to be equipped with MEMORY programm no. 1.11.

8. Technical Data

Hand-held transmitter operating	pulso 2, 4, 8 and 404/606 servor
Number of addressable receivers per work station	8 power packs and 4 lampheads of 6 motors each
Number of work situations in one room	2
Remote control functions	– output control – modelling light mode and on/off – lampheads on/off (singly) – photocell, IRS receiver on/off – auxiliary functions – 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 × 75 × 40 mm
Weight	340 g

9. 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 2 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. 4 power packs of various types

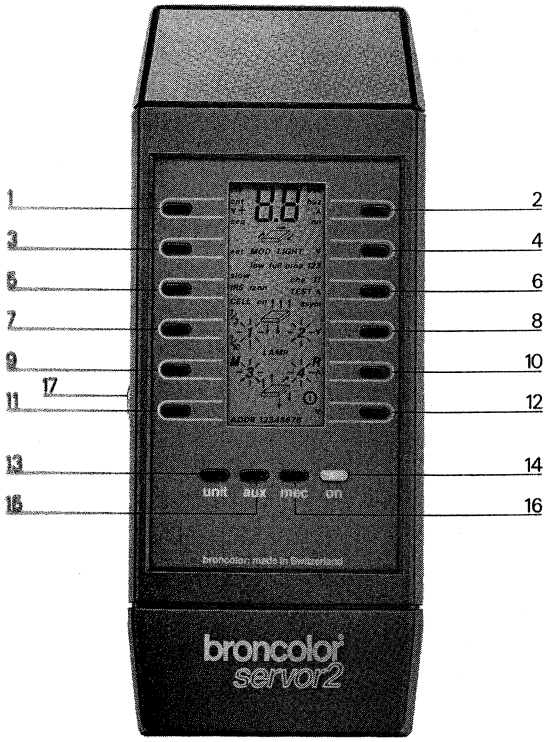
2.1 Preparation of power packs
set following programming at the power packs (note operating instruction)

Power pack
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

Programming the remote control servor 2
2.2 activate servor 2 by pressing key "on"
2.3 choose address 1 by pressing key 11
2.4 activate power pack 1 by pressing key 12
2.5 press key "aux" shortly (display changes to auxiliary functions)
2.6 press key "aux" again, however longer (display changes to programming function)
2.7 choose address by pressing key 11 and start programming
address 1: prop 1 1/10 6.0
address 2: prop 1 1/10 6.0
address 3: prop 1 1/10 6.0
address 4: prop – 1/3 6

2.8 press key "aux" again, however shortly (display changes to IRS/cha)
2.9 set addresses 1, 2, 3, 4 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 termined.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