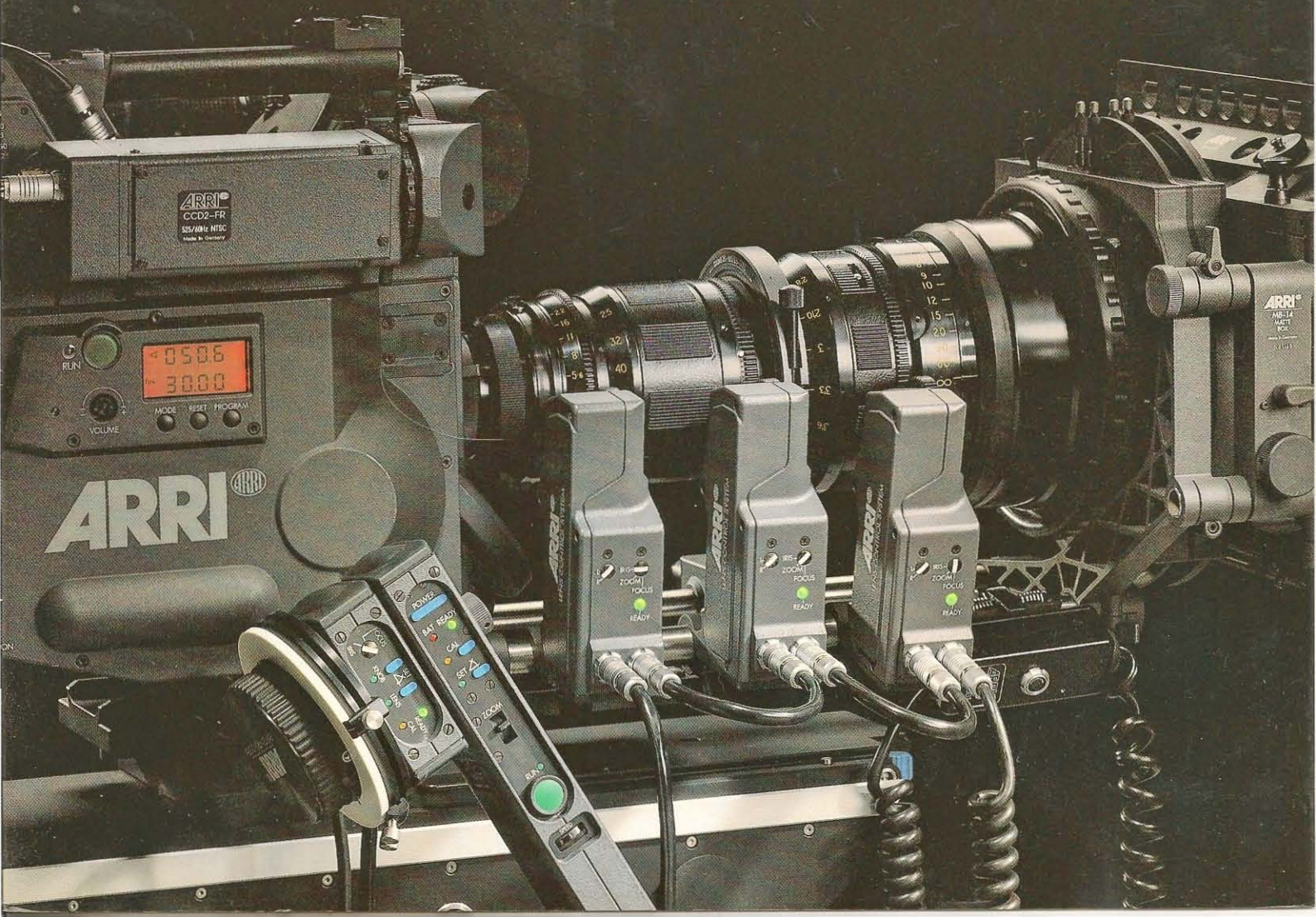
ARRI

LENS-CONTROL-SYSTEM



LENS-CONTROL-SYSTEM

Compact
The vertical motor orientation allows for the use of short-sized lenses together with production matte boxes for all common camera types.

Sturdy and reliable
Tried and tested ARRI quality combined with the latest microprocessor technology.

Quick and precise
Efficient motors and digital control offer fast and precise lens adjustments.

Convenient and easy
Even complicated functions are carried out via push button. Cable connections are simple and foolproof.

Modular
Motor units are identical and can be used for all functions. Modular manual operating units provide optimum ergonomics.

System-adaptable and intelligent
Automatic self-check and RS 232 offering standardized interface for computer controlled system.

Future reliable
Additional modules for the system open the way to further special functions. For example, recording and repeating of control sequences, or iris linking to the camera's mirror shutter for present and future-orientated systems.

Every motor unit may be used optionally for zoom, focus or iris

The system

The new ARRI Lens-Control-System combines high operating convenience with system capability. One complete system consists of three motor units. The manual operating units are connected to the main unit by only one cable.

The lateral setup onto the matte box rods (Ø15 or 19mm), the simple and foolproof cable connections, as well as the convenient setup including automatic calibration, offer a new standard in the handling of remote lens control systems.

Interfaces on the motor and manual operating units provide easy access to the camera-system or any computer-based control.

The digital processing of signals with microprocessor control and network technique ensures utmost operating safety of the lens control system.

Operating convenience

It is a sophisticated and intelligent system: automatic input of the lens range, its limitations, gear ratio relation or scale offset are simple, safe and quick to adjust. Only one pushbutton-operation is needed to adapt the system to the gear ratio of a mechanical follow focus, for instance. Therefore, the focus/iris controller comes closer to a mechanical follow focus, than any other existing system does.

Focus- and iris-control on the ARRIFLEX 35 III with a short-sized lens and an iris ring that varies with the distance adjusted

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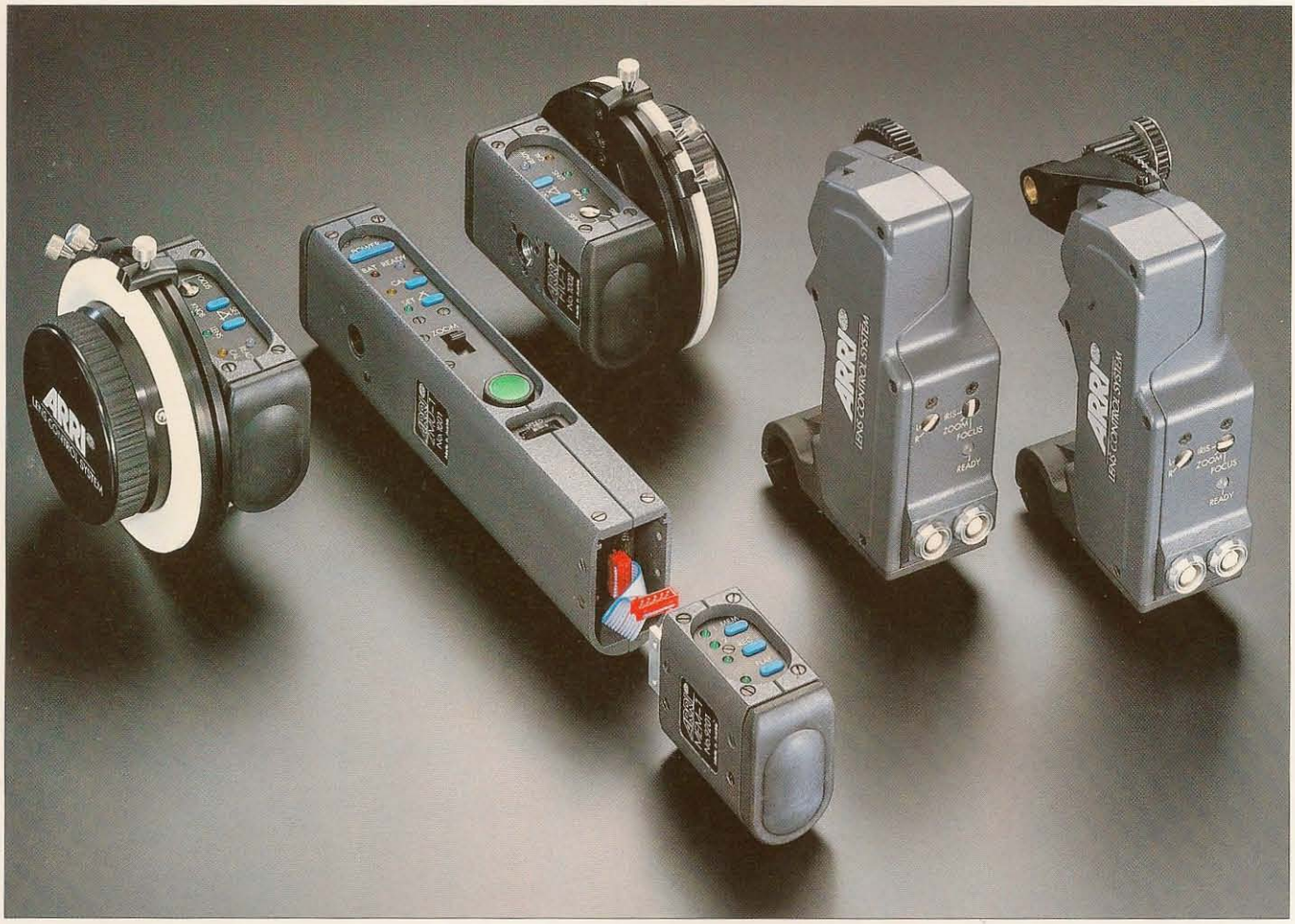

The modular components of the ARRI Lens-Control-System: handset with memory-module (optional) and motor units (right side with special aperture drive)

The memory module

The memory module was designed to expand the main manual operating unit of the LCS. With this add-on module rehearsed sequences can be easily stored for repetition.

The attachment to the manual operating unit is fast and simple and can be done at any service shop or rental company in no time at all.

Vertical Setup

With their vertical orientation, the motor units may also be used for very short-sized lenses together with a production matte box.

An optional iris drive module offers aperture control, for lenses where the position of the iris ring varies with focus adjustment.

On both rod diameters – 15 or 19 mm – the exchangeable clamp-on mechanism and the dovetail adapter for the ARRIFLEX 35 III provide optimal setup positions.

Simple connections

The cable connections of the lens control system are reduced to a minimum, providing short setup and detachment times. Foolproof cable connections mean posssible faults are avoided.

Overall system-capability

All motor units are system-adaptable. They may also be controlled via a personal computer.

Further add-on units can be connected to the LCS bus. This free access also enables special exposure programmes to run on this system as well as the read out of additional user information.

A linking unit to the camera is already planned. Then, the camera running speed or the shutter angle can be automatically integrated into the lens control. A personal computer will be utilised as a superior control and operating unit.

LENS-CONTROL-SYSTEM

Summary of functions

Zoom system

- Smooth change of focal distance, controllable over a wide speed range
- Ergonomic speed control knob with re-set function (thumb control)
- Pre-selection of speed range (speed rate dial)
- Clamp-on attachment on pan-handle (via adapter)
- Automatic calibration for lens protection
- Range limit set via push button
- Start/Stop key for camera run
- Attachment module for focus/iris handwheel
- System interface (RS 232) optional

Focus/Iris system

- Precise and repeatable positioning of focus/iris ring
- Handwheel with removable scale discs and various end-stops (same size as mechanical follow focus)
- Automatic, quick calibration
- Range limitation on lens and handwheel via push button. (Matching gear ratio to the mechanical follow focus unit is possible)

Memory module

- Recording and repeating of rehearsed sequences on the zoom, focus and iris axis via push button
- Storage of current adjustments (focal distance, general distance, iris) as well as re-tracing of already stored settings
- Transmission of recorded process data to a computer via serial interface for longterm archiving (software option)
- Input of recorded data for repeating adjustments (software option)
- Prepared for functional collaboration with the CLF unit (camera interface) to use the camera´s mirror shutter (i.e. 535) in adjusting sequences.

Technical data

Temperature range	-20°... +50°C	
Power supply	24V DC 12 V DC (with reduced speed)	
Maximum torque	1 Nm	
Setting time	2 rev/s at 0.25 Nm, 24 V (standard bevel gear)	
Adjusting range	15 revolutions (bevel)	
Noise level	< 20 dB(A) (n < 0.5 rev/s)	
Positioning preciseness	< 0.5 degree (½ line breadth on the lens)	
Cable length	maximum 100 m between motor unit and manual operating unit maximum 3 m between zoom and focus/iris unit	
Weight	Motor unit	approx. 0.6 kg
	Zoom unit	approx. 0.4 kg
	Focus/Iris unit	approx. 0.4 kg

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