

Instruction manual

King, Queen & Duke

The idea

Music is an essential element of our emotional quality of life. Playing musical instruments, you can experience music authentically and immediately. On the other hand, when you are reproducing music, it is often "administered" by several electronic components.....

Administration does not suit to emotions, restriction not to experiences. To have music at our disposal at any time and everywhere, we can not do it without some components. It is our business to build a bridge across the musical and the technical world.

In the ideal case, components become instruments, cover and contents are one thing, very close to the human beings, to the senses, to the being.

The concept

Easiest operation, best sound, highest longevity, combined with an unique styling, create the bridge. An unique combination of design, function and engineering.

The execution

All cabinets, including the remote control, are handcasted in aluminium. Thanks to this process every cabinet gets an individual appearance.

The serial number is marked by hand and will be registered in the production records. The front sides are grinded by hand, the emblems founded. King, Queen & Duke on principle will be supplied as a integrated unit in a wooden case. They come with all required connection cables and are ready to play.

The sound

High-quality musical instruments need a play-in time to yield optimum sonic performance. That applies for King, Queen & Duke as well. Using new devices in permanent operation at normal volume, the play-in time will be about 14 days, after a longer inactivity about two hours.

Set up and Installation

Operating voltage

Make sure that the visible label of King and Queen near the power connector (A), indicating the factory-set AC mains operation, corresponds to the nominal AC operating voltage for your location. If the indicated voltage is incorrect relative to that supplied in your area, see your dealer.

Connections and cables

Connect the loudspeakers "Duke" to the amplifier "King", using the supplied XLR-cables. Connect one of the two pairs of outputs (C) of the CD-player/Tuner combination "Queen" to the central pair of inputs (B) of the amplifier "King", using the RCA-type cable (Cinch) which is supplied as well. Please note that the assignment of the sides must be correct: Red = right channel = lower single-ended input (Cinch).

Connect Queen's antenna input (E) to the antenna wall socket using an antenna cable (not supplied).

After transport or storage, considerable differences between the temperature of both the devices and the listening room can occur. Allow the devices time to acclimatize to room temperature. Plug the power cord in to the power connector (A) of King and Queen and then plug it into the wall outlets.

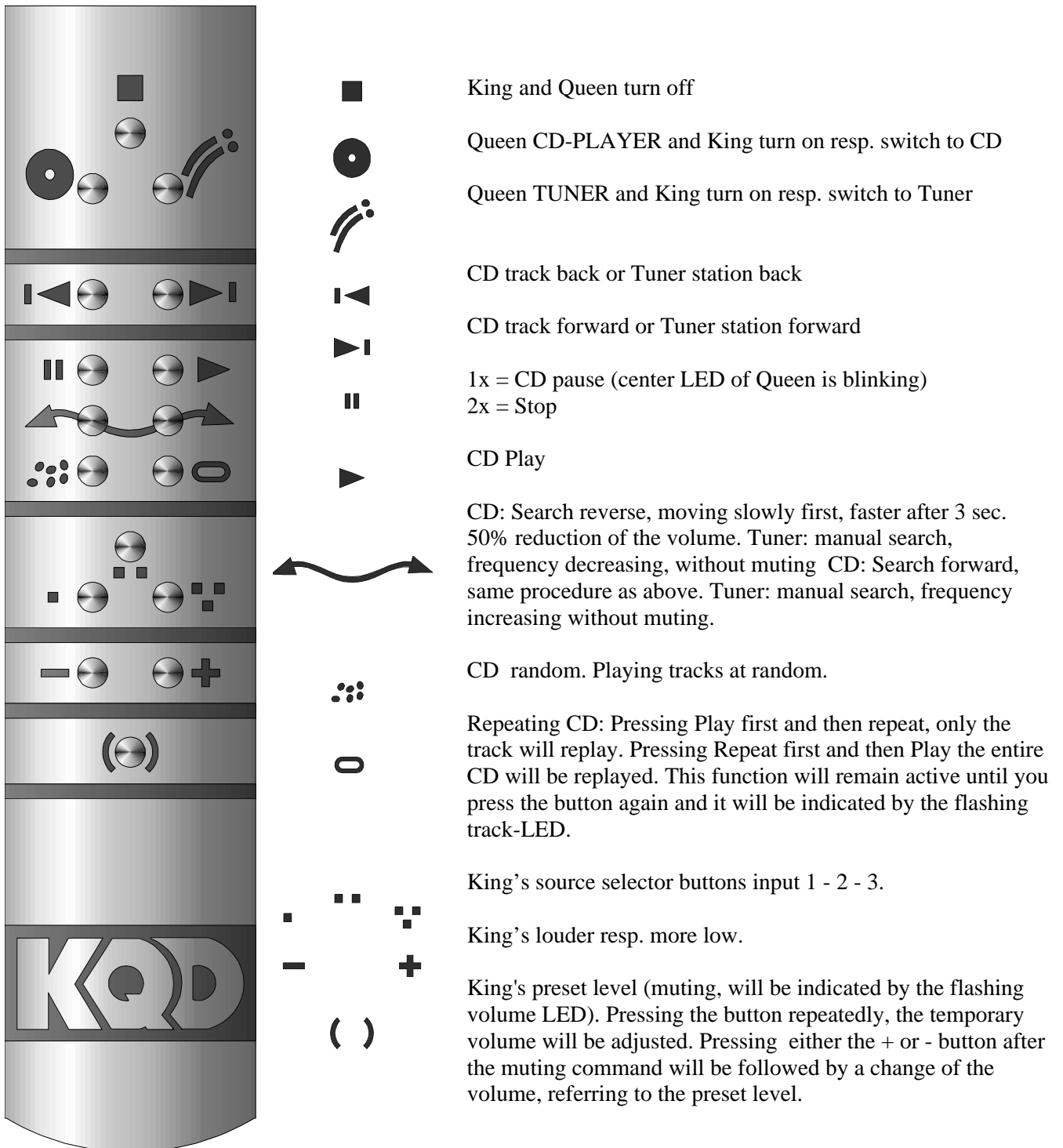
Programming the tuner/Reset

Queen's tuner has a storage capacity of 79 slots. After previous "reset", which will be released by pressing the button (B) on the rear panel with the tip of a pencil, they will be loaded automatically with well receivable radio stations. The sort will be made in chronological order from memory 20 on within the range of reception. The first 19 slots will particularly be assigned to enable you to store your favourite radio stations manually in the order you desire.

After the automatic programming you can load the station memories as follows: Tune in your selected station. Press the external buttons of Queen at the same time now. The LED indicator jumps to a free memory. You can change this proposal pressing one of the external buttons. When the desired position has been reached, confirm this pressing the center button. To facilitate further change of programming, the indicator jumps back to the starting point again.

For more information on the operation see the following pages.

Remote control



Please hold the remote control with its frontside against the units to ensure reception. If the commands of the remote control will not be executed, reduce the distance and press again. If the transmission performance decreases (after 1 year approx.), change the batteries. To do this, remove the two screws on the back side, open the case and insert two new 1,5V mignon batteries.

For care clean the remote control with a humid soft cloth. Never use solvents.

King



Buttons Press the bottom !

- Left more low
- Center on, input two selected/off
- Right louder

LED's

lower rank, three LED's, input display

- Left input 1 active
- Center input 2 active
- Right input 3 active
- Upper series, five tri-colored LED's, volume display, indicating as a running light, beginning with green = low volume across yellow = medium to red = loud.
- When the muting button on the remote control is activated, the indicator LED of the selected volume will blink.



Rear panel

- Socket A = power connector equipped with a locking clamp and voltage selector. Please make sure that the preset voltage is correct. If the component shows no function, check the fuse. A spare fuse (2A slow blow) is located in the clamp.
- Socket B = input connectors, from the left side to the right 1-2-3.
Left channel = white above, right channel = red below.
- Socket C = outputs for Duke's. Connect them with the supplied special cable (XLR). Looking from the front panel right side = right Duke, left side = left Duke.
- Socket D = Connection of remote control synchronable. (Please connect them with the supplied cable to socket „D“ at QUEEN)

Attention: If King does not accept any operating function, a reset of the control of the microprocessor could be necessary. Disconnect the unit from the power source (Reset) and plug it in again after approx. 30 seconds. Whenever the power cord is connected to the outlets, an energy-saving mode is activated to maintain the high quality of King. This ensures best performance after start-up of the system and increases the longevity of the unit.

Queen

Buttons (Press the bottom !)

- Center: On/Off, switch over, stop.
Pressing shortly = start CD, pressing again = switch to tuner (Queen's reaction time approx. 3 seconds), from CD-play = stop. Pressing longer = turn off.
- Left: CD = pause from play mode. Repeated pressing within 1 second = track back. TU = station back.
- Right: CD = play, repeated pressing = track- TU = station forward.
- Left and right at the same time = TU programming mode. The previously tuned station can be brought to another location. The station - LED jumps over to a free location. Pressing the left or right button, the desired place can be selected. Pressing the center button, the process will be saved and the program mode can be left.

LED's

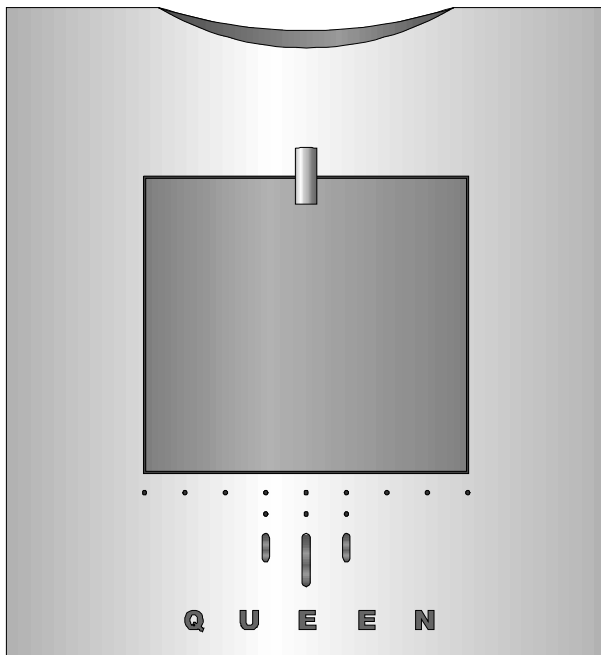
- The upper series of LED's indicates CD titles or stations from 1-9. Starting the CD, the total amount of the tracks will be shown. Slow flashing indicates the repeat mode, fast flashing the random mode. In the TU-operation flashing indicates the station which is currently to be duplicated.
- The lower series with the tri-colored LED's complements the upper one.
Left: green = 10, yellow = 20, red = 30.
Right: green = 40, yellow = 50, red = 60.
Right: red+left: green = 70, yellow = 80, red = 90.
- Center green = TU, yellow = CD ready to play, red = no CD, red/yellow flashing = pause.

CD-compartment

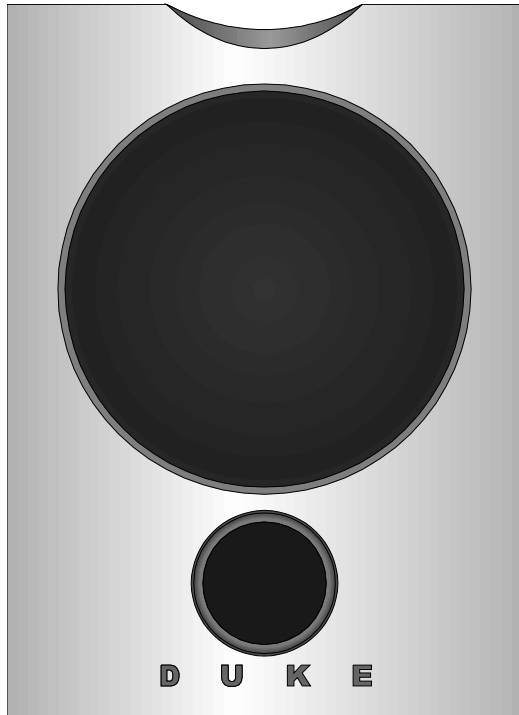
- Unlock turning the locking handle. Open the lid downwards. When the lid is closed, a right turn will lock the compartment. Attention: CD starts playing only with a closed compartment.

Rear panel

- Socket A = power connector equipped with a locking clamp and voltage selector. Please make sure that the preset voltage is correct. If the unit shows no function, check the fuse. A spare fuse (0,160A slow blow) as located in the clamp.
- Socket B = microprocessor reset. Press this button to read-in the stations. This is essential in case of a new set-up or if the device is unable to receive commands.
- Socket C = output connectors. Red below = right channel. White above = left channel. One pair provides connection to the Kings, the other pair serves as a record output.
- Socket D = Connection of remote control synchronizable. (Please connect them with the supplied cable to socket „D“ at KING)
- Socket E = antenna connector, 75 Ohm.



Duke



Front side

- Above: Two-way-Duplex-loudspeaker chassis with fixed cover.
- Below: Outlet of the bass reflex channel.



Rear side

- Above: Cavity for fixing the loudspeaker chassis. Do not loosen in any case the visible screw on the rear side.
- Below: XLR-connector = connection to King with a supplied special cable

King, Queen & Duke

KING integrated pre - power amplifier

Casted dustproof resonancefree aluminum cabinet. Cooling is implemented over the complete surface and guarantees constant thermal environment for all electronic parts. Professional in and output sockets. Power output with 3-pol gold plated XLR Connectors. The special standby mode for the input stage eliminates the warm-up phase. The volume control is regulated by a special photoresistor circuit. This circuit prohibits sound decay and mechanical fallout. Power ability is contributed by the oversized ring core transformer 250VA. Microcomputer controlled anti clipping circuit without influence in the direct signalpath. The volume is automatically turned down to prevent power distortion or speaker damage. All functions are controllable via remote control. The volume control, as well as the turning on and off are adjustable directly on the frontpanel. Adjusted volume is signalized by a five row three colored LED display. The three input channels by three LED's.

Input voltage:	1,5 Volt
Input resistance:	47 kOhm
Output power:	2 x 32 Watts at 8 Ohms 2 x 62 Watts at 4 Ohms
Minimum impedance:	> 1,5 Ohms
Overall feedback:	< 6 dB
Distortion:	< 0,1% only K ²
S/N ratio:	< -70 dBV unweighted
Channel difference:	< +/- 0,2 dB
Power bandwidth:	5 Hz - 250 kHz

Dimensions (w x h x d):	280mm x 312mm x 100mm
Weight:	8,2 kg

DUKE loudspeaker

Casted aluminum cabinet with integrated antiresonance ribs. Bass reflex labyrinth and speaker back armoring to eliminate uncontrolled vibrations. Professional 3-pole gold plated XLR sockets for secure connection. Special designed two way system with coax position of the tweeter. 170 mm woofer with coated carbonfiber membrane, extremely stiff and resonance free. Long distance voice coil and large ceramic magnet system. Tweeterconstruction consisting of lightweight silkmembrane and neodymemagnet. Crossover with coherent amplitude and phase correction

Frequency response:	42 Hz - 24 kHz
Crossover:	6 and 12 dB / Okt.
Turnover:	3,2 kHz
Efficiency:	88 dB / W / m
Impedance:	8 Ohms (min > 6 Ohms at 15 kHz)
Power handling:	60 Watts

Dimensions (w x h x d):	220mm x 312mm x 245mm
Weight:	9,5 Kg

QUEEN CD drive DA - converter and FM tuner

Casted resonancefree aluminum cabinet. Cooling is implemented over the complete surface and guarantees constant thermal environment for all electronic parts. Professional in- and output sockets. Two parallel output sockets for playback and recording useage. All functions remote controllable. Power on and off, track and station control, start, stop and pause functions can be adjusted directly on the front panel. 99 tracks or stations and the used functions are signalized by a nine row single color LED's and the bottom three three color LED's.

CD drive - DA - converter

18 Bit 64times oversampling DA converter with superb linearity.
Phase corrected digital / analog filter.
The double speed CD- drive guarantees a perfect signal readability.
A special circuit designed for timing synchronization reduces different forms of digital jitter.

Converter:	18 bit 64 x Oversampling
Filter:	8 x Interpolation
S/N ratio:	< -120 dB
Total harmonic distortion:	< -90 dB
Channel separation:	> 100 dB
Deviation from linear phase:	< +/- 0,5 degrees 0 Hz - 23,5 kHz
Bandwidth:	0 Hz - 23,5 kHz -3 dB 0 Hz - 21,5 kHz -0,00025 dB
Output voltage 0 dB:	2,54 Volt
Output resistance:	600 Ohm

FM tuner

Self programming. Maximum 79 radiostations in memory.
Selection of stations through skipping back and forth.
Ability to program channels at your personal favors.
Memory is able to preserve channel programming for aprox.
4 weeks in case of AC fallout.
Automatic selection of mono stereo switching due to channel quality.

Ant. input impedance:	75 Ohms unbalanced
Frequency range:	87,5 MHz - 108 MHz
Sensitivity 50dB S/N:	20 dB μ
Max S/N:	75 dB Mono 69 dB Stereo
Distortion:	< 0,3%
Stereo separation:	> 30 dB, typ. 45 dB
Audio range:	10 Hz- 15 kHz
Seek level:	> 60 dB μ
Output voltage 45 kHz swing:	1,5 Volt
Output resistance:	50 Ohm
Dimensions (w x h x d):	280mm x 312mm x 100mm
Weight:	6,5 kg