

D U E T I I

U S E R ' S G U I D E

C.R. Baggs

READ THIS FIRST

The Duet II combines class A circuitry with our proprietary condenser microphone and either the Ribbon Transducer or LB6 pickup. Steel (Duet II-RT) or nylon (Duet II-RTN) string models are available with the Ribbon Transducer. There is also a "classic series" (Duet II-CS) model for the LB6 pickup that is a re-creation of the original Duet.

USER'S GUIDE

A. On/off: The on and off switch function has been moved from the strapjack to the control panel to allow stereo access without the need for separate jacks. The Duet II has a soft start circuit that slowly powers up the system over a 15 second period to avoid turn-on explosions in live inputs. You may notice a little distortion if you play during this power-up cycle. This is normal and the distortion will disappear when the voltage stabilizes.

B: Battery LED: The Duet II has a battery status LED that remains on at all times when the switch is in the "on" position. As the battery weakens, the light will begin to dim. When the light becomes difficult to see, replace the battery.

C: 3-band graphic equalizer: This EQ is specifically tuned to frequencies (see specifications) that are most often needed by the acoustic guitarist. The treble is used to add transparency and presence to a dull PA, or when you need to cut through a band. It is also useful in cut mode to mellow-out harsh HF horns, common in PAs. The midrange control is used to remove honk from guitar amps and PA speakers. We do not recommend boosting the mid control. The bass can be used to add extra warmth and foundation to the tone, or to tame an unruly subwoofer in cut mode, when too much bass is encountered in the PA.

D: Phase invert: This switch changes the polarity of the signal. Phase affects the way the guitar top is pressurized by the low frequency sound waves from the loudspeakers. When the guitar top and loudspeaker are out of phase with each other, the sound waves from the speakers will act to damp the guitar top, like a shock absorber, and low-end feedback will be minimized. There is no way to predict which phase will be right in any situation. It will be readily apparent which phase sounds best and is most feedback-resistant when you flip the switch during sound check. Phase will also affect the way the guitar signal mixes live and on tape (especially when overdubbing) with other instruments. Experimentation will produce the best results.

E. Pickup/mic: This rotary knob is essentially a "pan" control that allows the microphone and pickup to be blended to taste. Turning this knob counterclockwise will isolate the pickup; turning it clockwise will isolate the microphone. Note: when in mix mode, there is always a small percentage of pickup in the signal, even in "full mic" position, to minimize the risk of feedback.

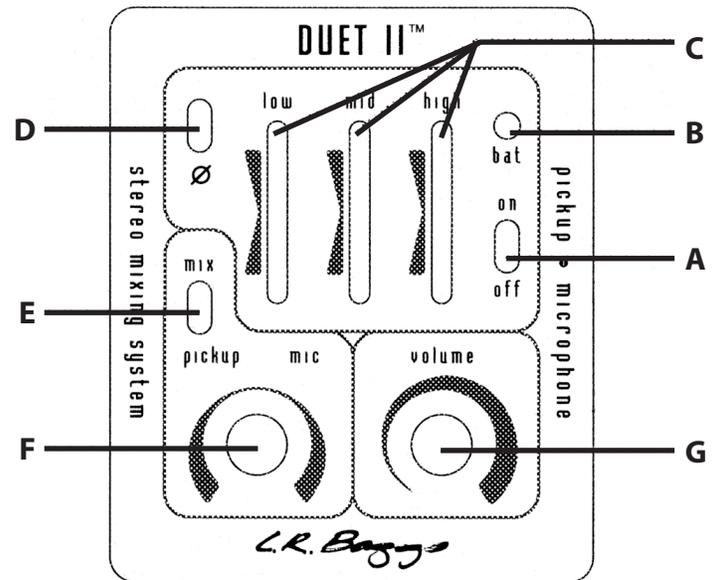
F. Mix-pickup: When the switch is towards the "mix," the microphone and pickup are combined by our proprietary blending mixer. In the "pickup" position, the mic is turned off and the mixer is disabled. The pickup then operates at full range with all other controls functional. This setting is useful for extremely loud situations, in which cut and presence of the pickup alone are needed.

G: Volume control: This controls the output volume. The Duet II's output is hot enough to overdrive some inputs and cause distortion. If this occurs, simply turn the volume down slightly.

MONO OR STEREO OUTPUT

Mono: The mono mode is recommended for performers who want to plug in with a standard cord and play. All functions, including the mic/pickup blend and EQ controls, are available in this mode. To use, simply set the on/off switch on the control panel to "on" and plug a standard mono male cord from a muted channel or amp into the output jack.

Stereo: This mode provides pristine discrete class A buffered outputs for the mic and pickup, pre-mix and pre-EQ. It is useful for quality recording and for achieving the ideal live sound. You can use individual outboard EQ and effects for both channels. For live work, this will allow you to send just the pickup to the feedback-prone stage monitors and use more mic in the main speakers for the perfect house mix.



To use, set the on/off switch to "on" and plug in a stereo Y cable with the two legs of the Y plugged into two muted channels of any sort of outboard gear. Plugging in a stereo cable automatically routes a live pickup signal to the top and a live mic signal to the ring contacts of the stereo strapjack while disabling all onboard controls. Any blending, contouring and controlling of each output must now be done outboard.

Note: The stereo sensing circuit may not work properly if the mic (ring) output of the Duet II is plugged into any outboard gear, such as compressors or EQs, that have DC-coupled inputs and an input impedance lower than 47k. This type of input is uncommon in musical instrument and recording studio gear, but low Z, DC-coupled inputs do exist. The symptom of this condition will be distortion in the pickup (tip) channel. If you hear distortion in the pickup channel, try unplugging the mic from its channel. If the distortion on the pickup channel disappears, the mic is plugged into a low Z, DC-coupled input. The remedy for this is to not use this piece of outboard equipment.

S P E C I F I C A T I O N S

Size: 4.1" x 2.6"

Weight: 5 oz.

Battery Type: Single 9V

Current Consumption: 4 mA

Battery Life: 100+ hrs. (alkaline)

EQ (Duet II-RT)

Low: +/- 10dB @ 80Hz

Midrange: +/- 12dB @ 900Hz

Treble: +/- 10dB @ 10kHz

EQ (Duet II-RTN)

Low: +/- 10dB @ 250Hz

Midrange: +5dB / -11dB @ 1.5kHz

Treble: + 1 dB / -15dB @ 10kHz

EQ (Duet II-CS)

Low: +/- 13dB @ 80Hz

Midrange: +/- 8dB @ 950Hz

Treble: +/- 14dB @ 10kHz

Low Cut Filter: Fixed, 12dB/oct. @ 35Hz

Input Impedance

Pickup: 10 megohms

Mic: 22 kohms

Signal-to-Noise: -90dB, unweighted

Output Impedance: 600 ohms