Recording Your Band

Lincoln Center Jazz Orchestra (LCJO)
Recording Techniques

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Microphones and Placement

This year’s LCJO CD was recorded using simple or
"minimalist" microphone techniques. Our goal was to
capture the energy as well as the balance and musician-
ship of the LCJO as it was on that afternoon in May.

The overall sound of this recording came from three
omnidirectional microphones. We used Neumann M150
mics; these pick up sound from all directions, but
emphasize frequencies above 1 kHz, which come from
directly in front of the mic itself. These microphones
were placed to capture each of the primary elements
of the big band - rhythm, brass and reeds. Please refer
to the stage plot used in this recording, designed with
this microphone technique as well as historical
Ellington Orchestra stage configurations in mind.

For mic placement, measure the width of the section
and place the mic a distance of one half the section
width away from the center musician in that section.
For example, if the reed section is sixteen feet wide,
place the microphone eight feet away from the center
reed player. A good starting microphone height would
be six feet. Adjusting the height of the microphone is
often all that is necessary to find the perfect sound.
Also note that we asked musicians to stand during solos
to differentiate their sound from the section and to
make them more prominent in the instrument balance
overall without the need for individual microphones.

We did use a hand held vocal mic (Shure SM58) on
this year’s vocal selection to make sure the lyrics could
be clearly understood. We also placed spot mics on
the piano (AKG 414), the bass, (B&K 4011) and the
snare (B&K 4007) but these were used sparingly in the
mix to improve the definition of their sounds. In
venues that compliment the sound of a big band, the
use of this microphone technique can, in many cases,
eliminate the need for any artificial reverb or processing.
It provides an accurate picture of the performance
—allowing the true orchestral balance and musician-
ship to shine through.

Artificial Recording
Techniques

The use of artificial recording techniques is strongly
discouraged so that an accurate assessment of the
band can be obtained. If a digital reverb unit is used to
make a vocalist or musician sound better than they
really are - to gloss over bad intonation or to smooth
out an otherwise awkward balance - then that would
be an artificial technique. It’s no different than using
ProTools to edit between takes or repair intonation.
Using reverb or EQ to do justice to the orchestra is a
far different thing than using outboard gear to enhance
or alter the actual performance. Duke Ellington’s
orchestra didn’t use reverb because they needed to
distract the listener from a bad performance, but to
make you forget the fact that you were sitting at home
listening to a record and not experiencing the perform-
ance live. It’s not a question of capturing room tone
or whether or not their recording space has a lot of
natural reverb - it’s about demonstrating performance
ability and giving the most accurate portrayal of
the music as it was played. The whole point is to not give
a false impression of the band — one they couldn’t live
up to in person.