

Recording Engineers: Emma Azelborn and Kevin Allswede

Date of session: Feb. 11

Musicians: University of Michigan Orpheus Singers

#### Description of the Recording Setup:

We used four microphones: two Neumann KM86's, and two Beyer Dynamic CV710 with the CK703 cardioid capsules. The KM86's were lent to us by Dave Greenspan, managing producer of audio services at the Duderstadt Center, and we used them as our main mics in a blumlein technique. They were about 6.5 ft above the ground. The Beyer Dynamic mics were used as room mics, pointed upwards at opposite angles above the blumelein mics. They were about seven feet in the air. We used Dave's API 3124 pre-amp. The choir stood around the microphones in a circle with a 4 foot radius.

We added a little additional reverb to the room mics and put a slight EQ on the overall mix, dropping 1K by 2dB and adding a low cut at 150Hz. Some light compression was the only other post processing we added.

We chose blumlein because we knew the choir would be singing in a circle for intonation and balance. Blumlein has even response in all directions, so we thought it would be a good choice. We were very lucky to have Dave lend us some of his equipment to make our session possible.

#### Evaluation of the recording:

We are very happy with how the session turned out. Dave's mics sound incredible. If we could do it again, we would switch the mic stands and use the taller stand for the room mics so that they could be higher than they were. The foyer of Stamps has very nice reverb, but also has a little bit of a hum. We did our best to minimize it but it is still audible.



The singers stood in two circles around the blumlein microphones



























