

## Playback

All kinds of monaural recordings can be played back either through the built-in loudspeakers, a radio set, an amplifier, or through external loudspeakers or earphones. If you play back your recordings through the built-in loudspeakers or through two connected external loudspeakers, you may, if necessary, vary the ratio between the volumes of the two loudspeakers by means of the balance control 15. Turning this control clockwise will increase the volume of the right-hand loudspeaker, turning it anticlockwise will increase that of the left-hand speaker. With the control at center position, both loudspeakers will have equal volumes.

### Playback Through the Built-in Loudspeakers

1. Select the tape speed.
2. Select the desired track by means of the function selector 5.
3. Set the balance control 15 at center or normal position.
4. Depress the start key 1.
5. Adjust the volume by means of the volume control 14 and the tone by means of the tone control 16.
6. Playback is interrupted by means of the pause control 2 and terminated by means of the stop key 4.

### Playback through a Radio Set





1. Connect the radio set to the tape recorder via a K 541 Stereo Audio Cable as described for recording.
2. Set the radio for "Phonograph Pick-Up" or "Tape Recorder" respectively.
3. Start the tape transport and adjust the desired volume and tone by means of the corresponding controls of the radio set. The built-in loudspeakers of the tape recorder can be used along with those of the radio set at will. If this is not desirable, turn the volume control 14 anticlockwise.

### Playback Through External Loudspeakers or Earphones


External loudspeakers with an impedance of 4—6 ohms can be connected to the sockets I and II. It is also possible to connect only

**UHER**

one loudspeaker to either one of these sockets. Depending on the manner in which you insert the plug into the socket, the corresponding built-in loudspeaker is cut out or not (as shown).

It is also possible to connect earphones, for instance the W 212 Midget Magnetic Earphone or the W 671 Stereo Dynamic Headphones to the sockets I  and II . Also in this case the built-in loudspeakers can either be used or be cut out. In both instances volume and tone are adjusted by means of the pertaining controls  and .

### Note:

If you connect only one loudspeaker or the model W 212 Midget Magnetic Earphone, the balance control  must be turned anticlockwise or clockwise depending on the socket to which the loudspeaker or earphone has been connected.



## Echo

The UHER ROYAL STEREO will also enable you to produce reverberation and echo effects. Through adequate selection of the tape speed you may choose among different effects ranging from normal reverberation to an echo with an extremely long reverberation time.

The available tape speeds will furnish the following effects:

- 7 1/2 ips    reverberation with a short reverberation time
- 3 3/4 ips    reverberation with an extended reverberation time
- 1 7/8 ips    echo with a normal reverberation time
- 15/16 ips   echo with an extended reverberation time.

A recording with an added reverberation or echo effect is made in the following manner:

1. Select the desired effect by setting the recorder for the corresponding tape speed.
2. Connect the microphone to socket .
3. Set the function selector  either at its "Echo 1—4" position, for recording on tracks 1 and/or 4, or at its "Echo 2—3" position for recording on tracks 2 and/or 3.

The UHER logo is displayed in white, bold, sans-serif capital letters on a black rectangular background.

4. Adjust the proper recording level by means of the control "Level I" ⑨ and the volume of the effect by means of the control "Level II" ⑩ as usual.
5. For best monitoring results turn the balance control ⑮ anticlockwise as far as possible.
6. Playback is also effected in the same manner as in case of normal recordings. The function selector ⑤ may either remain in the "Echo" position or must be set at the position corresponding to the track on which the echo recording has been made.

## Synchronized Sound-on-Sound Recording

"Synchronized Sound-on-Sound Recording" means playing back one track and simultaneously recording on the pertaining parallel track. This allows various dubbing effects. You can, for instance, sing a duet with yourself. The illustration shows schematically what is happening in such a case.

The synchronized sound-on-sound process will be especially useful to the owners of slide and film projectors. The well-calculated design of the recorder will enable you to produce these attractive sound effects with the greatest ease.

In order to make a synchronized sound-on-sound recording, proceed step by step as follows:

1. Set the function selector ⑤ at its position "Synchro-Play I".
2. Turn the balance control ⑮ clockwise.
3. Connect the microphone to socket ⑪.
4. Connect an earphone, for instance the model W 212 Midget Magnetic Earphone, to the socket II ④, so that the built-in loudspeaker is cut out (see also page 18).
5. Make the first recording by means of a microphone as described before.
6. Rewind the tape until you reach the beginning of the recording.
7. Set the function selector ⑤ at its position "Synchro-Play II".
8. Put on the headset or earphone.

**UHER**

9. Set the recorder for recording operation and depress the start key. While you monitor the first recording played back through the earphone (volume and tone are adjusted by means of the pertaining controls 14 and 16) make a synchronous second microphone recording on the parallel track.
10. When the recording has been accomplished, rewind the tape and disconnect the plug of the earphone.
11. In order to play back the complete synchronized sound-on-sound recording, set the balance control 15 at center position and depress the start key 1.
12. Volume and tone are adjusted by means of the pertaining controls 14 and 16. By turning the balance control 15 clockwise or anticlockwise you may vary the ratio between the volumes of the two recordings.

## Multi-Play

The multi-play process allows multi-trick recordings by means of transferring an existing recording to a parallel track while adding a new recording simultaneously. By repeating this several times you may obtain for instance the effect of a "One-Man-Sextet". The illustration shows schematically what is happening in such a case.

The technically refined design of the UHER ROYAL STEREO will enable you to make multi-trick-recordings simply and easily in the following manner:

1. Set the function selector 5 at "Multi-Play I" and connect the microphone to socket 11.
2. Turn the balance control 15 anticlockwise and connect an earphone for the audio control operator to the socket 14. Insert the plug in such a way that the built-in loudspeaker is cut out.
3. Turn the modulation control "Level II" 10 anticlockwise as far as possible.
4. Now proceed to make your first recording, whose recording level is adjusted by means of the control "Level I" 9. The audio control

The UHER logo is displayed in a bold, white, sans-serif font against a solid black rectangular background. The letters are closely spaced and have a slightly stylized, modern appearance.

- operator can monitor the recording through an earphone. After terminating the recording, rewind the tape.
5. Set the function selector **5** at "Multi-Play II", connect another earphone for the performer to the socket II **4**; take care to insert the plug in such a way that the built-in loudspeaker is cut out.
  6. The balance control **15** and the volume control **14** are set at center position. The performer puts on the earphone and the tape transport is started for the second recording. The performer can synchronize his second performance with the first recording which is audible in his earphone. The audio control operator can monitor both performances in his headset. For adjusting the recording level of the new recording, he uses the control "Level I" **9**, and for adjusting the recording level of the first recording, which is being transferred to another track, he uses the control "Level II" **10**. This enables him to adjust the ratio between the recording levels of the two performances at will.
  7. For another additional recording, the tape must be rewound, the function selector **5** is set at "Multi-Play I", and the recording process is repeated as known. If you want to add a further recording, set the function selector at "Multi-Play II". For more recordings to be added, continue the described process, alternating the position of the function selector each time, until your multi-play recording has been accomplished.
  8. When playing back multi-play recordings, always take care to leave the function selector **5** in that position where it was during the last recording. Except for this, playback is made in exactly the same manner as described with respect to normal recordings.

## Dia-Pilot

If you own an automatic slide projector, your UHER ROYAL STEREO will enable you to enjoy a fully automatic sequence of slides along with synchronous sound (as in a sound film); for the recorder will not only provide the comments and musical accompaniment, but will also control the changing of the slides by the automatic projector. As you don't

The UHER logo is displayed in a bold, white, sans-serif font against a solid black rectangular background.



need any additional equipment for this purpose, the whole process will run smoothly and without difficulties. You need only perform the following few manipulations:

1. Make the recorder and the slide projector ready for operation. Connect the slide projector with its remote-control cable.
2. Set the function selector ⑤ at "1—4", or "stereo", for monaural and/or stereophonic sound recordings. For sound recording, the tape recorder is operated as described in the paragraphs "Monaural Operation" and "Stereo Operation". If you so desire, connect a record player or a tape recorder to the "Phono" socket of your UHER Royal Stereo, in order to accompany the show with some kind of sound or other. (Perhaps you have even recorded the original sound background on the spot, while taking your photographs, by means of the ever-ready UHER "4000 report-L", the recorder which is independent of the mains). If you want to prepare your "sound-show" with extra care, write a little script beforehand, to guide your synchronizing work. The recording level of the comments, which you record through a microphone, is adjusted by means of the control "Level I" ⑨, while the control "Level II" ⑩ is used for blending in background music or some other kind of sound. For changing the slides, use the remote control of the projector, in order to be able to synchronize the appearing picture with the pertaining acoustic accompaniment.
3. When the recording has been completed, rewind the tape, return the slide magazine of the projector to its starting position and disconnect the remote control cable from the projector. Then disconnect all the signal sources and establish a connection between the remote control socket of the projector and the "Projector" socket of the tape recorder. For this purpose you need the cable K 911, which should be available at your photo dealer's.
4. If you have made a monaural sound recording, set the function selector ⑤ at the position "Dia-Pilot II". If, however, the sound recording was a stereophonic one, set the function selector at the

**UHER**

position "Dia-Pilot I". Then set the recorder for recording operation and start the tape transport again. Now you will hear the sound recording, which is to accompany your slide-show. Each time you want to change a slide, depress the key marked "Dia-Pilot" ⑰. This causes the projector to change the slide. Simultaneously, a control pulse is recorded on track 4 which will, when you play back this tape later, cause an automatic change of slides.

5. When all slides have been shown, rewind the tape and return the slide magazine of the projector to its starting position. Now your synchronized slide show can run by itself, controlled automatically by your UHER Royal Stereo. The function selector ⑤ remains at the position "Dia-Pilot I" or "Dia-Pilot II" respectively. Then set the recorder for playback, start the tape movement, and adjust volume and tone according to taste.

#### **A useful hint:**

If you should make a mistake while setting the control pulses, or if you should wish to add a slide later on, merely wind the tape once more, as described above under 3. and 4. and depress the key "Dia-Pilot" ⑰ whenever you want the slides to change. The control pulses recorded earlier will be erased automatically and will be replaced by the new ones.

## **Stereo Operation**

### **Recording**

Stereo operation means that, instead of one, two tracks are used simultaneously for recording as well as playback. Always begin recording with the green leader of the tape. After the first passage of the tape, the reels can be reversed and recording or playback may be continued by starting with the red leader of the tape. Each channel is provided with its own db-meter.

The UHER logo is displayed in white, bold, sans-serif capital letters on a solid black rectangular background.