



THE ASSOCIATION OF MOTION PICTURE SOUND

FUTURE PROPOSED CONTROL MEASURES FOR SPREAD OF COVID-19

AMPS Feature Mixers Group 36 PRODUCTION SOUND MIXERS WORKING IN FEATURE FILMS & HIGH-END TV IN THE UK

The Association of Motion Picture Sound (AMPS) is a craft guild made up of over 550 of the most imaginative and highly experienced people working in sound for film, television and games. Members have been nominated for many awards both in the UK and internationally and include many BAFTA, Oscar, Emmy, and MPSE winners.

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Contributors to this document will endeavour to advise how sound crews can utilise new and existing technology to fulfil safety requirements against the spread of Covid-19 whilst maintaining the quality and creative edge of UK film production.

These recommended control measures have been prepared in consideration of scripted production only so will not necessarily be transferable to other genres e.g. factual or entertainment.

PRE-PRODUCTION:

- 1.1 Sound Team providing transmitters and lavalier microphones to cast and headphones to crew will clean all sound equipment in order to properly follow protocols and will not reassign equipment without re-sanitising. Sharing of headphones and personal microphones will not be allowed.
- 1.2 Sound department will hand over timecode units and timecode slates to camera department at the start of the project. Timecode synchronisation will be done remotely using a timecode network, negating the necessity to physically jam cameras or slates.
- 1.3 Sound will provide audio of actors to camera operators and crew using remote heads, synchronised with any video screen latency to assist remote operation of cameras in order to reduce number of crew on set.
- 1.4 Sound department may provide systems for communication between on & off set departments if required.
- 1.5 Should a wide angle camera of set be provided for line-ups, rehearsal and shooting, sound department will provide sound to crew who would previously have been on set as requested by production.
- 1.6 Sound department to carry additional headphones and receivers as more headphones will be required for crew not able to be on set during line-ups, rehearsals & takes.



- 1.7 Each member of the crew to be given a labelled headset which they are responsible for and not shared with anyone or can provide their own.
- 1.8 Sound department to carry additional radio mics if required. Actors may be assigned two transmitters to avoid battery changes that can be made more easily by swapping transmitters.
- 1.9 Sound department to work with costume department in pre-production to pre-rig microphones in optimum positions in costumes to avoid microphone being affixed to actor or requiring further adjustment when artist is in costume. This may require costume decisions to be taken earlier. May need testing during pre-production. Consider shooting costume camera tests with sound. Consider possibility to quarantine costumes before handing to actors.
- 1.10 In circumstances where fixing microphones to costumes is not an option sound crew to work with hair department to investigate hairdresser fitting microphone in hair.
- 1.11 Sound department to consult with VFX supervisor to investigate if microphones can be mounted external to costumes and digitally removed.
- 1.12 Pre-rig multi-speaker public address system for 1st AD, Director or others as required to address crew. Number of microphones to be predetermined with production. Microphones not to be shared between users.

2. CREWING

- 2.1 Sound mixer should be prepared with back up crew on standby and allow for crew flexibility in case of illness during filming.
- 2.2 Additional crew may be required to manage and maintain additional headsets and radio microphones.
- 2.3 One 1st AS to be in charge of radio mic fitment and to use adequate equipment provided by production for personal protection and protection of others.
- 2.4 One 1st AS to be on set as boom operator. Some setups may require 2 booms.
- 2.5 One 2nd AS to be assigned to clean, sanitise equipment and to keep records of equipment. May also need to act as audio data wrangler (see 4.5)

3. SOUND DEPARTMENT DAILY PROCEDURES

- 3. 1 Sound crew to follow production hand washing protocols using soap and facilities provided by production and particularly before contact with any cast or crew member.
- 3. 2 Only qualified sound crew to handle any sound equipment.
- 3. 3 Sound crew to wear the designated PPE provided by production and follow the two-metre social distancing or other designated social distancing protocols advised by production.
- 3. 4 Sound mixer to set up recorder, mixers and any equipment he/she will be using rather than assistants.
- 3. 5 Sound Mixer and crew to only use their designated headsets.
- 3. 6 Walkie Talkies and accessories such as covert units not to be shared. To be designated to each sound crew member.



4. ON-SET

- 4.1 To allow for sufficient working space all equipment on set to be strictly minimized to allow space for crew to follow social distancing rules. All remaining kit to be accessible on the trucks as needed, but not to be brought on set.
- 4.2 Production should advise other departments to give priority for space on stage or location for crew over equipment.
- 4.3 The Sound Mixer does not need to be on set but should be provided with suitable isolated area. On location this may be a separate room.
- 4.4 For any sequences in moving vehicles sound mixer should be in separate vehicle.
- 4.5 Sound mixer to use radio mics with extended range or with recording capability to negate having to travel on tracking vehicle or picture vehicles. Provision should be made for individual recordings to be re-mixed for dailies at end of day or a suitable break in shooting.
- 4.6 Sound Mixer should communicate with the director, Script Supervisor, DP, Video Village, 1st AD and the sound crew via headset talkback and with other departments via walkie talkies across various designated channels
- 4.7 Sound equipment to travel to Hair & Makeup, Wardrobe trailer, Green room, Basecamp etc., only with a member of the Sound Crew.
- 4.8 Boom operator(s) (1st AS) must stand and work at a minimum of two metres from talent during blocking, marking, lighting setups, rehearsals and takes.
- 4.9 Some setups may require a second boom operator.
- 4.10 Headphones to be clearly labelled to a designated person and should be individually bagged in a Ziplock and handed to the user. At wrap headphones are to be collected and placed in a "Contaminated" crates by designated 2nd AS and cleaned before being re- bagged for next use.
- 4.11 Sound dept to keep stock of disposable headsets and additional headphone receivers as agreed with production.
- 4.12 Sound department where possible to use pre-rigged multiple speakers to provide a wider coverage at lower volumes for better communication in preference to mobile speakers. Provide separate microphones for multiple users. Number of microphones to be agreed with production.
- 4.13 Sound dept to supply a separate small speaker set up for use by the Director or 1st AD to communicate with the actors using separate microphones.
- 4.14 Sound department to be prepared for any off camera actors to work off set using earwigs or other devices.
- 4.15 Keep cable use to a minimum. Sound mixer to consider use of Dante and other Ethernet based technology to reduce number of cables used or employ fibre technology to increase range of radio mic receivers to enable working away from set.
- 4.16 Sound dept may be able to advise on open comms headphone systems similar to those currently in use by grips and crane crew but with greater range and capability for much larger number of users. For example <https://www.riedel.net/en/products-solutions/intercom/bolero-wireless-intercom/>



5. INTERACTION WITH CAST FOR RADIO MICS

- 5.1 Radio mics on booms and actors may be necessary to enable Sound Crew to remain 2 metres from any cast members. Sound recording by one boom may be not be possible on multi camera shoots. Consideration of a second boom should always be given.
- 5.2 PPE as advised and provided by production must be worn during the handling of all radio mic equipment preferably by one designated sound crew 1st AS.
- 5.3 The actors can be helped by the sound team to position their own lavalier microphone in order to avoid any physical contact but preferably costumes will have a microphone built in during pre-production. Some microphones may need to be positioned where they are visible and removed digitally. This may mean them being similar in colour to the costume so they are camouflaged in wider shots or using easily seen colours to enable better CGI tracking to be advised by VFX supervisor.
- 5.4 Any items coming into contact with a cast member will be sanitised before being allocated to another cast member. A designated 2nd AS will be in charge of sanitising all equipment and keeping contaminated and uncontaminated equipment separated and logged.
- 5.5 Actors may be assigned two transmitters which will be labelled clearly. When a transmitter batteries run low it can be swapped to a second transmitter with pre-loaded with fresh batteries and sanitised. At wrap all sound equipment will be placed in a labelled "Contaminated" crate. Once cleaned it should be restored in a new labelled Ziploc type bag, or appropriate container ready for use the next day.
- 5.6 Where possible sound dept should utilise a remote app or similar device to control or make adjustments to transmitters avoiding the need to physically access the transmitter when worn by an actor. If not possible changes should be made to a 2nd transmitter, re-sanitised, placed in a new Ziploc bag or appropriate container and swapped by the actor.

6. VIDEO VILLAGE SET UP

- 6.1 Sound crew will attempt to provide audio for any additional monitors to be set up to allow for social distancing.
- 6.2 Sound Mixer will provide audio from set to off-set crew during lineups, rehearsals and takes.
- 6.3 Sound mixer may be required to provide separate mixes to off-set crew for privacy. For example crew may only hear boom mics and not radio mics.



7. EQUIPMENT CLEANING

- 7.1 At wrap thorough cleaning and disinfecting of all the sound equipment must be undertaken by members of the Sound Team.
- 7.2 Replace microphone mounting components that cannot be thoroughly cleaned.
- 7.3 Cleaning products for use by the Sound Crew should be as approved to be effective for avoidance of Covid 19 transmission. Generally 70% Isopropyl alcohol is the preferred substance to use as it evaporates slower from the disinfected surface, making it more efficient than 91% or 99% alcohol. Use the alcohol solution in a spray bottle which produces a fine mist and promotes the dispersion of the liquid without soaking into the sound equipment. The use of pre-packaged and disposable wipes, containing 70% alcohol is also recommended.
- 7.4 Sound dept to consider UV sterilisation if approved.
- 7.5 Use disposable, lint-free cloths, wipes or cotton swabs in the wiping phase, and avoid reusing these items on a new piece of equipment to be disinfected.
- 7.5 Once the equipment has been disinfected and dried, it is recommended to store each piece of equipment in Ziploc-type bags to ensure its safety until the next use. Try to remove the air from the bag before sealing it.
- 7.6 Lavaliers, hyper-cardioid Microphones and others:
The cable and the head of the lavalier microphone should be carefully wiped with the 70% alcohol solution and a clean cloth. If the microphone has a foam head, it is to be removed, sprayed with the alcohol solution, then dried.
- 7.7 Transmitters, receivers, monitoring systems (Comtek / IEM / IFB / etc), earwigs, headsets, sync boxes, slates:
These should be cleaned with the 70% alcohol solution and a clean cloth carefully cleaning contacts, electronic terminals and switches with a cotton swab slightly moistened with the alcohol solution.
- 7.8 Reusable elastic straps and accessories for hiding lavaliers: Spray the elastic bands generously with the 70% alcohol solution and allow them to dry completely. They should also be machine washed regularly.
- 7.9 Sound mixer cart, boom operator cart, work surfaces, poles, antennas, cables, audio accessories, etc.:
These general pieces of gear should be cleaned and wiped with the 70% alcohol solution and a clean cloth.
- 7.10 Equipment Bags, and transport cases: Spray the bags, suitcases and transport cases with the 70% alcohol solution and allow them to dry completely. Only take what is essential onto set.
- 7.11 Consideration should be given to using UV light sanitising once efficacy has been scientifically confirmed.



8. RUSHES / DAILIES PROCEDURES

- 8.1 Sound Data Cards/Media:
Shipping of the sound cards/media at the beginning and at the end of the day must be done with the same precautions involving cleaning and packing of card media. Before sending the media to the Digital Utility/Loader or to editorial gently clean the card and its hard-covered case with the 70% alcohol solution and a clean cloth. Once they have travelled from the lab/transfer back to the sound department clean them again.
- 8.2 Audio data wrangler or mixer may need to process any audio recorded as in 4.5 for dailies.

REFERENCES AND RESOURCES:

- **Why 70 % Alcohol Disinfects Better Than 91% Or 99% Alcohol**
<https://tinyurl.com/y93kn52l>

- **Lectrosonics: Equipment Disinfection**

<https://tinyurl.com/y7pxnygo>

- **Schoeps Microphones: Microphone Use & Covid-19**
<https://tinyurl.com/y7n64b85>

- **DPA Microphones: Cleaning Equipment**

<https://tinyurl.com/ycpt8har>
<https://tinyurl.com/ybaj5xg3>

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