

## The 2019 TCC Audio-Visual system (DRAFT 2)

### **(1) Introduction**

- Essentially, the new system is in three parts:
  - (i) **Stage equipment:** This enables a variety of stage equipment to be linked into the new **audio-visual system**, and a laptop to be operated from the front of the hall.
  - (ii) **Hall equipment:** This enables the stage equipment to be mixed together prior to the resulting signal being sent (via a **DENON video/sound processor** and the connected amplifiers) to the hall speakers. The processor also enables a **Blu Ray player** (and/or a laptop computer – *not provided*) to be played through the system.
  - (iii) **Ceiling mounted projector and screen:** The projector can be accessed via either of the above.
  
- Use of the above is described in sections (2) and (3).
- Much of the new equipment is housed in a new, black cabinet, situated in the rear, left-hand corner of the hall. This cabinet itself is enclosed by purpose-built cupboard.
- **Keys** are needed to access both the new hall cupboard and the cabinet housed above the 'stage access' stairs.
- The new **stage equipment** includes a 12 socket **stage connector box**, mounted on the side of the stage cabinet. This provides plenty of scope for the use of a variety of equipment (e.g. numerous (radio) microphones, musical instruments and CD players).
- Users wishing to present from the stage area, and only needing to access the projector from their laptops, are able to do so via a **HDMI** socket situated adjacent to the stage.
- It is possible to also relay sound from a laptop situated in front of the stage, but the hall equipment then needs to be separately linked in to the laptop as well – audio cannot be sent via the **HDMI** socket.
- In the 'standard' set up, sound only emanates from the left and right, front speakers.
- On **Film Nights**, additional central and sub-woofer speakers are 'plugged in' to the system, thus continuing to provide the previous 'sound surround' experience.
- There is some (limited) scope to vary the speakers in use via the **DENON processor**, but this is not recommended.
- The TADS people continue to use their own production equipment, but now connecting it to the new **TCC hall speakers** for when they make their general announcements.
- On **Production Nights**, TADS will still base themselves within the hall, but now plugging their equipment into new connections housed in a 'hidden' pillar cupboard.

## (2) Stage equipment. (DRAFT 2)

### (i) Turning on the equipment.

- A '**POWER (CABINET)**' switch (low down, near floor, behind curtain) powers the two switches mounted on the side of the wooden cabinet above the stairs, and the **radio microphone** and the **induction loop controllers** which are housed within the cabinet.
- The upper switch powers the ceiling-mounted '**PROJECTOR**' and the '**SCREEN**'; the other switch is for the '**LIGHT**' in the cabinet.
- The '**SCREEN CONTROLLER**' is now mounted on the wall, behind the curtain; it is operated via the buttons on the righthand side.

### (ii) Use of the equipment.

- A '**STAGE BOX**' is mounted on the side of the wooden cabinet, and enables up to 12 items to be plugged in and connected to the **sound mixing console** situated at the back of the hall.
- Three channels/sockets (**nos. 1-3**) are already in use for the radio microphones, and another two (**nos. 4 & 5**) allow for the relaying of sound from any laptop connected at the front of the stage.
- A '**HDMI (1)**' socket is mounted on the side of the cabinet, and is used when showing images from the stage area up to the ceiling-mounted **projector**. Various leads are housed within the cabinet.
- Thus, the 10m white (*or an alternative*) **HDMI** lead can be fed from the socket through to the front of the stage, enabling a laptop to be connected to it from anywhere in front of the stage. For this lead, the white end is plugged into the '**HDMI (1)**' socket, and the other end (fitted with a black relay unit) is connected, via another short **HDMI** lead, to the laptop.
- If a laptop does not possess a **HDMI** socket, then an appropriate converter (e.g. **VGA to HDMI**) will need to be purchased and fitted to the laptop.
- A long **power extension lead** is also available, which can be plugged into a socket behind either of the stage curtains, and used to provide power in front of the stage (e.g. to power a laptop).
- If sound is required as well, the 10m '**mini jack to phono**' lead is plugged into the '**earphone**' socket on the laptop, with the lead's '**RED**' and '**WHITE**' connectors being plugged into the matching phono sockets next to the '**HDMI (1)**' socket on the cabinet. *Note:* Potentially, the sound output of the laptop will need be switched (back) to the earphone socket, for example (Windows 10):  
SETTINGS → SYSTEM → SOUND → Choose your Output device → Speakers.
- The generated sound is played out to the hall via the '**CD**' option on the **Hall equipment**; see below.
- Use the '**SCREEN CONTROLLER**' to lower the screen.
- The (white) remote control for the **ceiling-mounted projector** is stored in the cabinet. Press the '**ON**' button to turn it on, and wait for it to power up; it can be a bit slow.
- If the required picture is not displayed by the projector, ensure that '**HDMI 1**' is the displayed image source using the projector's remote control – (e.g. by pressing the '**HDMI**' button once, or twice).
- If there is still no picture, ensure that the laptop is properly connected and set up (e.g. check that it is set to duplicate the laptop's screen images onto a separate screen/tv).
- The **Radio microphones** are controlled via the cabinet at the back of the hall.

### (iii) Turning off the equipment.

- Turn off the **projector** by pressing the '**OFF**' button twice; allow it to complete its 'shutting down' cycle and return the remote control to the cabinet.
- Return the **screen** to its highest position.
- Disconnect leads, returning them to their storage locations.
- Turn off the appropriate power sockets and, if used, the **Hall equipment** – see section (3).

**(3) Hall equipment - (in locked cupboard adjacent to serving hatch). (DRAFT 2)**

**(i) Turning on equipment.**

- Turn on the two switches inside the cupboard, to the right of the inner cabinet.
- Turn on the **DENON Sound Processor** (- button, illuminated red, on the lower, left side of the front of the unit) and, if required, the **Blu Ray player** (- button on top of the unit, on left hand side).
- Other items should already have powered up.
- When required (i.e. **Film Nights**), the **Central** and **Sub-woofer** speakers are stored in the stage side room and plugged into the respective sockets at the side of the stage.

**(ii) Use of the equipment.**

- The **projector** and **screen** are set up as described in section (2), above. However, you now need (via the **projector's** remote control) to select '**HDMI 2**' as the picture source.
- The item to be played through the audio-visual system is selected via the **DENON Sound processor's** remote control (or via the controls on the front of the unit):

(a) **BD = Blu Ray/DVD player.** The cabinet's player is operated in the normal way, and has its own remote controller. The '**eject/close**' button is on top of the unit, on the right hand side. If the projector does not show the picture, check that the **DENON Sound processor** is set to '**BD**' and not '**DVD**' – done via the 'display screen' on the front of unit.

(b) **GAME 1 = Cabinet laptop.** A laptop can be connected via the **HDMI** lead accessed via the (lockable) central drawer of the inner cabinet. The laptop can be sat in/across the drawer or on the 'drop down' table mounted on the inside of the cupboard door. A **trailing power socket** is available within the cabinet, above the **DENON** unit.

(c) **CD = Mixing Console.** Currently used for the radio microphones, the TADS (hall) sound and, where required, sound from a laptop connected at the front of the stage. Connections:

**Channel 1: RM1** = TCC's handheld radio microphone.

**Channel 2: RM2** = Radio microphone (e.g. headset).

**Channel 3: RM3** = Radio microphone (e.g. headset).

**Channels 4 & 5** = Audio from any laptop connected at front of stage.

**Stereo 2: TADS** connection to hall speakers.

**Notes:** \* The '**INPUT**' levels from the stage items are adjusted via the '**GAIN**' (- for gross adjustment) and '**FADER**' (- for fine adjustments) controls on the appropriate channels on the **mixer**; see separate diagram.

\* The **mixer 'OUTPUT'** is governed by the two (yellow) '**OUTPUT FADERS**' on the lower, front right of the unit; it is best to not allow the levels (on the light meters above) to go into the red.

- All options can take a few moments to 'settle in' before sound and/or picture operate correctly.
- The actual **volume** of sound sent from the **DENON** sound processor to the speakers is controlled via the large, round (right hand) '**MASTER VOLUME**' control. As a general rule, a setting of around '**-22**' produces a good volume in the hall.
- Individual speaker (volume) adjustments can be made via the 'gain controls' on the appropriate **stereo amplifier(s)**, situated below the **DENON** unit – but this is not usually necessary.

**(iv) Turning off the equipment.**

- Turn off the **projector**, close the **screen**, and turn off any **stage equipment** - as described above.
- Disconnect any laptops, and turn off the **DENON Sound Processor** and **Blu Ray** player.
- Turn off the two switches beside cabinet; close and lock the cupboard.