

A few considerations before you start to design your studio

- Read a few books, look at 'Sound on Sound' magazine and do some research
- Make sure that wiring ducts and conduits are at least 3 times larger than your estimates. Remember, you will need to pull cables through and this requires a lot more space and you may have to pull cables through that have connectors already fitted
- The same applies to any cable holes in walls, always leave 3 times as much space as the dimensions of your planned cables
- Do not recess cable runs into acoustically treated walls as this will damage the acoustic integrity. Build boxed cable housings out from the walls wherever possible
- Always ensure that cable ducts are easily accessible and never sealed behind walls or beneath floors – all cables need to be easily accessed should you need to repair, alter, add or modify your installation
- Try not to use electronic lighting dimmers as they all radiate HF interference onto the audio path. If you must dim your lighting use Variac lighting dimmers (transformers which vary the voltage). Although more expensive and larger, these are the only reliable and noise free solution
- Keep audio and mains cables well apart to minimise possible interference
- Plan carefully and remember that as well as electric and audio cabling you will require other cables including phones, alarms, LAN, 'On Air' ready lights, studio playback, door entry phones, CCTV and security cameras, fire and safety standby lighting, fire sensors, Midi lines etc. Run ceiling mounted cable trays around the building so that you can have all ancillary cabling and facilities away from the studio audio and mains feeds
- Run a few audio tie lines to rest rooms and other nearby recreational areas, allowing (for example) an ambient microphone in corridors or for a track to be recorded from the kitchen or playback from the studio into the lounge etc.
- Make provision to have a talkback microphone in the live areas, to enable the engineers to hear musicians in the studio without having to use a desk channel. A cheap boundary mic mounted in the ceiling linked to a basic amplifier and speaker in the control room will suffice
- Lay a separate, transformer isolated, mains voltage ring main throughout the recording rooms, including control room and studios. Visitors will often bring equipment into sessions and having an isolated mains supply available will make life easier and avoid too many trailing cables - you could also run a separate 110v mains supply so that 110v step-down transformers are never needed
- Ensure that materials and furnishings used are fireproof and anti-static (or non-static) wherever possible
- It is important that mains electricity wiring and sockets and mic wiring and sockets etc. are kept well apart and 600mm above the floor for ease of access
- In addition to your 'mood' studio lighting you should have simple standby 'set-up and cleaning' lights in both the control and live rooms allowing bright lighting for cleaning, setting-up etc. using the less bright 'mood' studio lighting when being creative
- Ensure you have storage space close to the live room to keep flight cases, spare instruments, drums etc. rather than cluttering up the live area during sessions
- Make a note of all fuses required by different items of equipment and carry spares, perhaps with a spare fuse taped to the rear of each piece of equipment
- Don't forget that the sound of the control room will change once the equipment is installed. Racks, consoles and other equipment will affect the acoustics, so fine tuning is always required once the gear is installed
- Use good quality 'near field monitor speakers' in the control room, keep them close to you and follow the manufacturers mounting instructions

have fun!