PTZ-12G GENLOCK OPTIONS

WHAT IS TIMECODE?

TIMECODE IS AN IMPORTANT FORM OF PRODUCTION METADATA. IT'S AN ACCURATE CLOCK THAT COUNTS THE NUMBER OF FRAMES PER SECOND. EACH FRAME RECORDED IS ASSIGNED A SPECIFIC TIMECODE, ALLOWING EDITORS TO FIND A PARTICULAR FRAME ACROSS MULTIPLE CAMERA AND AUDIO SOURCES BY REFERENCING THIS NUMBER. TIMECODE DOESN'T SYNCHRONISE CAMERAS, IT PROVIDES A HIGHLY ACCURATE REFERENCE POINT THAT ALLOWS VIDEO CONTENT RECORDED USING MULTIPLE CAMERA SOURCES TO BE SYNCHRONISED IN POSTPRODUCTION.

WHAT IS GENLOCK?

GENLOCK SYNCHRONISES THE CAMERAS. IT USES THE PULSE THAT GENERATES THE FRAMES WITHIN THE CAMERA AS THE SYNCHRONISATION POINT. THIS PULSE SENDS A SIGNAL TELLING EACH DEVICE TO CAPTURE FRAMES AT EXACTLY THE SAME TIME, CREATING AN INCREDIBLY ACCURATE WAY TO ALIGN MULTIPLE SOURCES OF VIDEO CONTENT.

WHY USE GENLOCK?

IN TERMS OF AVOIDING DRIFT AND PROVIDING SYNCING POINTS FOR POSTPRODUCTION, WIRELESS TIMECODE IS A GREAT TOOL, BUT IF YOU WANT REALLY ACCURATE SYNCHRONISATION FOR LONG TAKES AND ALL DAY SHOOTING, IT'S ALSO IMPORTANT TO GENLOCK THE CAMERAS TO A COMMON SYNC SOURCE.

FOR EXAMPLE, ON REALITY SHOWS, WHERE SHOOTING SEQUENCES CAN OFTEN BE SEVERAL HOURS LONG WITH HUGE VOLUMES OF RECORDED CONTENT, PRODUCTION AND POSTPRODUCTION TEAMS ARE NOW RECOGNISING THE BENEFIT OF ACCURACY AND RELIABILITY WHEN USING GENLOCK AS WELL AS TIMECODE ON MULTICAMERA SHOOTS.

SYNCHRONIZATION OPTIONS USING ROSS GEAR:

- **CONNECT PTZ TO CARBONITE**
  WITH THE CARBONITE SWITCHER THERE IS A FRAME SYNC OPTION TO SYNC THE PTZ CAMERA.

- **CONNECT PTZ TO ULTRIX**
  ULTRIX HAS AN INTEGRATED FRAME SYNCHRONIZER SD/HD/3G. THERE IS A FRAME SYNC LICENSE, WHICH CAN BE USED TO SYNC THE PTZ.

  IDEAL FOR SITUATIONS WHERE THE PTZ IS A LONG DISTANCE AWAY, THE SDI OUTPUT IS CONVERTED TO FIBER THEN FROM THE OTHER SIDE WE CONVERT THE FIBER BACK TO SDI AND AL SYNC'D BY ULTRIX

- **VIDEO DISTRIBUTION AMPLIFIER**
  USE A VDA TO COMBINE AND REDISTRIBUTE THE VIDEO AND REFERENCE SIGNAL FROM THE PTZ TO ELSEWHERE IN YOUR SYSTEM.

- **GATOR-SYNC**

  EXTENDING ONE CABLE FOR THE VIDEO SIGNAL CABALLING TO THE GATOR-SYNC DEVICE WHICH HAS 4 INPUTS, CAN BE USED IT TO SYNC 4 CAMERAS, NO ULTRIX OR CARBONITE REQUIRED OR AVAILABLE.

- **IP INSTALLATION:**
  IP INSTALLATIONS .. THE RIEDEL GATEWAY HAVE FRAME SYNC OPTION IN THEIR FUSION BOXES

- **OTHER OPTIONS:**

  [ULTRASYNC ONE](#)

  [LOCKIT](#)

  EXTERNAL SYNC OR CONNECTION VIA THIRD PARTY DEVICE EG SWITCHER.