

116R™

SYNCHRONIZATION WITH A CAMERA

CABLE SYNC

DIGITAL 1/F (one pulse per frame)

The 116R (No. 20075) records a sync track (parallel to the audio track) of one pulse per frame at **24fps and 18fps**. Most Super 8mm cameras have the necessary pulse output in the form of a flash/strobe socket. Cameras without it can be modified by Optasound or any qualified service center.

60Hz/50Hz (PILOTONE)

The 116R (No. 20175) records, and will resolve in playback to a sync track of **60Hz** (i.e. 60 cycles per second — 2½ cycles per frame at 24fps) or **50Hz** (European standard) as generated by the Pilotone sync generator on the camera. This sync system is common to most 16mm and 35mm cameras and to a few of the newer Super 8mm cameras.

CABLE-LESS SYNC

CRYSTAL CONTROL

The 116R (No. 20275) includes a 60Hz (or optional 50Hz) Crystal Sync Generator (CSG) that attaches to the 'SYNC' input on the 116R. This extremely accurate sync signal is recorded on the sync track in the normal way, but there is the added advantage of no umbilical cable connection between the crystal controlled camera and the recorder.

The crystal sync system enables the filmmaker to use as many crystal controlled cameras and recorders as he wishes. In playback the 116R will resolve to either the line (60Hz/50Hz) or the crystal.

The CSG is available separately (No. 20475) for use with the 60Hz/50Hz 116R recorder.

DIGITAL, 60Hz/50Hz (PILOTONE) & CRYSTAL

The 116R (No. 20375) is available with all the above sync facilities — switchable in a single unit.

116R™

FUNCTIONS

REMOTE CONTROL

The single cable connect between the camera and the 116R, in addition to sync registration, enables the recorder to be operated remotely from the camera's on/off switch.

CONTINUOUS RUN

The 116R can also be set to run continuously and record the camera's sync pulses only when the camera is turned on, permitting continuous sound recording with the intermittent filming.

AUDIO RECORDING

MANUAL:

In this mode the recording level is set by the operator and evaluated on the VU meter.

AUTOMATIC (ALC):

In this mode the recording level is set automatically by the limiter built into the 116R. Recording is immediate with no adjustment delay time.

RESOLVING

In the playback mode the 116R will lock into sync with any unit that supplies it with a pulse identical to that which was recorded as a sync track in the first place. For example, if a Digital 1/F sync track was recorded from the camera then, in playback, the 116R will lock into sync with, as an example, a projector that supplies it with one pulse per frame.

This built-in self-resolving facility permits:

SYNC WITH A PROJECTOR:

- For transfer to or from the film mag stripe.
- For double system projection.
- For synchronous post-dubbing.
- For sync mixing.

SYNC WITH THE ESTEC:

- For transfer to or from Super 8mm fullcoat.
- For transfer to or from Super 8mm film mag stripe.
- For sync mixing to or from Super 8mm film mag stripe and/or fullcoat.

SYNC WITH A MAGNASYNC, ETC:

- For transfer to or from 16mm or 35mm magnetic film.

SYNC WITH VTR, FILM CHAIN, ETC:

- For transfer to or from videotape.