

# INTRODUCTION TO THE *Jubilee* 16mm



**ST 416**

## Main highlights of the Jubilee-Series

- Modern design and colours.
- Upgraded processor motor regulator board for extreme friendly film handling.
- New designed foot control, also for extreme friendly film handling. (option ST60)
- Upgraded processor universal counter system.
- Standard with Bi-phase (50Hz) output for external syncing (master).
- Integrated touch screen for all audio settings.
- Digital processor sound reproduction system.
- Stereo / 2 channel / mono switchable SEPMAG sound reproduction. (ST416 only).
- Standard XLR balanced audio outputs.
- Standard motor controlled sound shift system for one audio track (ST416 only).
- Standard Super16.





## General Features

- Strong, rigid steel chassis, scratch resistant paint. Transport castors.
- Large solvent resistant table top in three sections.
- All metal parts corrosion protected. Self lubricating bearings.
- Electronic drive system, processor controlled.
- Motor controlled sound shift system for one audio track in respect to the picture.  
Digital display of shifted frames for sound track.
- All tracks can be individually disengaged.  
Automatic lock of disengaged tracks against offset motion.
- Adjustable film tension.
- Easy access for maintenance.
- Operating voltage selectable from 100 – 240 Volts / 50/60 Hz.
- Power consumption: 800 W.

## Configuration

- Track 1: 16mm standard picture COMOPT 16mm - sound (mono). (COMMAG: optional)
- Track 2: 16mm magnetic sound SEPMA, centre-edge track / stereo (selectable).
- Friendly film handling.
- Maximum capacity of 650 meter / 2000 feet of Acetate film / PE sound film on bobbins.
- Ground glass back-illuminated by 7000°K (approx.) LED light source.
- Multipurpose processor counter display, monitoring all stages of counting: time – length (meters / feet) - frames and converts every count into another.

## Picture System

- Optical compensation with 18 face revolving prism.
- Very brilliant, bright (260 lux) and sharp (>80 lines/mm picture).
- Excellent picture steadiness (<1,0%).
- Framing at standstill and during operation.
- Lamp 12 Volts / 100 Watt / high quality very bright projection screen.
- Lamp is automatically dimmed in standstill to protect the film from heat.
- Lamp is easily accessible and can be adjusted from the (top) working plate in three ways to get the maximum light quality.
- Projection system with highly polished surface mirrors.
- Projection areas: standard 212 x 288mm. (optional Super16 - 212 x 360mm)
- Large projection housing with flexible masks and universal counter.
- (video) camera adaptor system (option ST170 / ST177).

## Drive System

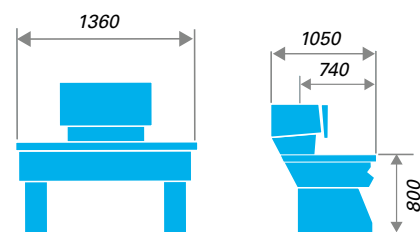
- Well proven one motor drive system with belt driven frictions with adjustable film tension, for film bobbins and film reels.
- Adjustable time for acceleration and deceleration for maximum safe film handling.
- Sync speeds 24/25 f.p.s. (frames per second) variable wind speed from 0 to 200 f.p.s.
- Changing 16mm sprocket and sprocket ring for shrunken material is possible (optional).
- Variable speed control from 0 – 200 f.p.s. including display for an exact read-out film speed. (option ST200)
- Bi-phase (master) output to synchronize with external equipment like a sound follower.

## Audio System

- Digital sound reproduction operated by touch screen.
- Each preamp with volume, treble, bass and balance.
- Playback stereo SEPMAG, mono switchable.
- Two way high quality loudspeakers, nominal 2 x 40 Watt.
- Balanced XLR two channel/stereo +4dB output.
- Headphone socket (1/4" jack). Volume control by touch screen fader.
- Automatic muting at high speed.
- White (standard) and red light ( optional) COMOPT, changeable by user.
- Frequency response:  
COMOPT 160 – 8.000 Hz within  $\pm 2$  Db.  
Optional: COMMAG 40 – 10.000 Hz within  $\pm 2$  Db.  
SEPMAG 40 – 10.000 Hz within  $\pm 2$  Db.
- Signal-to-noise ratio: COMOPT 58 Db. / COMMAG 48 Db.
- Wow and Flutter, linear  $<0,3\%$ .

### Options

<b>ST57</b>	Table working lamp with dimmer	F
<b>ST60</b>	Foot control	F
<b>ST62</b>	COMOPT 16mm red light / Cyan optical sound reader	N
<b>ST66</b>	SEPOPT 16mm (optical sound head), with pre-amp	F
<b>ST66/3</b>	COMMAG sound module, 16mm	F
<b>ST99/16</b>	Service kit for shrunken 16mm film 0,75-1,5%	N
<b>ST170</b>	(video) camera adaptor system for digitizing 16mm with special optics, without camera*	F
<b>ST177</b>	(video) camera adaptor system for digitizing 16 and S16mm with special optics, without camera*	F
<b>ST169</b>	(video) camera condenser 16mm for ST170 / ST177	N
<b>ST200</b>	Variable speed control, including display	F
<b>Z50</b>	Time elapsed counter	F
Other options and customer specifications: on request.		
<i>N = extendable by user or service engineer, F = factory installation only, * = only with camera, advised/installed by Steenbeck</i>		



Weight: 150 kg. Measurement in mm.

## More than 60 years of film table precision



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