

# SONY®

NTSC

## Time-Lapse Videocassette Recorder **SVT-RA168/RA40**

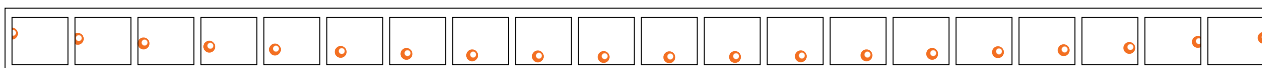


# Quality Recording and Playback for Those Critical Moments

Sony's new SVT-RA168/RA40 time-lapse videocassette recorders deliver clear playback images and capture more information than conventional time lapse VCRs. With a host of new user-friendly and convenient features, the SVT-RA168/RA40 recorders will enhance the efficiency and ease of use of your CCTV system.

## RealAction

The SVT-RA168/RA40 achieves high-quality time-lapse recording thanks to the incorporation of Sony's RealAction technology. Sony's RealAction technology allows the SVT-RA168/RA40 to record 20 fields per second in 24-hour recording mode – that's four times as much information compared to conventional time-lapse VCRs (5 fields per second). The SVT-RA168/RA40 with its improved recording density provides smooth, natural recording even of fast moving objects.



RealAction recording 20 fields/second



Normal time-lapse recording 5 fields/second

## APC (Adaptive Picture Control)

For maximum-quality recording at all times, the SVT-RA168/RA40 recorders feature APC (Adaptive Picture Control) – the function that automatically detects the condition of the recording head and the videocassette tape and then sets the optimum recording-head current. APC enables the SVT-RA168/RA40 to record clear images even after long periods of use.

## Maximum Recording Times

### SVT-RA168

Recording speed		Maximum recording time		Interval	Audio recording	
T-120	T-160		T-120	T-160		
6	18	Time-lapse mode	6	8	Possible	
18	24		18	24		1/20
30	40		30	40		1/12
48	64		54	72	0.15	Impossible
72	96		78	104	0.22	
96	128		102	136	0.28	
120	160		126	168	0.35	
168	224		174	232	0.48	

### SVT-RA40

Recording speed		Maximum recording time		Interval	Audio recording	
T-120	T-160		T-120	T-160		
6	18	Time-lapse mode	6	8	Possible	
18	24		18	24		1/20
30	40		30	40		1/12

## Choice of Recording Modes

### Auto Repeat

This feature allows the SVT-RA168/RA40 to automatically rewind the tape when it reaches its end and then re-start recording. This enables virtually continuous, unattended operation using a single tape. Auto Repeat is automatically disabled in Alarm Recording mode to safeguard against recording over an alarm event.

### Timer Recording

A built-in timer allows the user to set the exact recording time and recording mode in advance. Timer Recording can be preset to either weekly or daily, with holiday and daylight settings also available. You can also operate Timer Recording externally via the EXT TIMER IN terminal. If an alarm occurs, the SVT-RA168/RA40 will initiate recording as required even if it is in Standby mode.

WEEK	START	STOP	SPD
SUN	---	---	OFF
MON	---	---	OFF
TUE	---	---	OFF
WED	---	---	OFF
THU	---	---	OFF
FRI	---	---	OFF
SAT	---	---	OFF
DLY	---	---	OFF
EXT	**:**	**:**	OFF

### Alarm Recording

When an alarm signal is received via the ALARM IN terminal, the recorder will automatically switch to Alarm Recording mode regardless if it is in Stop or Power-off mode. The Alarm Recording speed and duration can be set in advance. The SVT-RA168/RA40 recorder can quickly locate and review recorded alarm segments by using one of its user friendly functions such as Alarm Scan, Alarm Recall or Alarm Search. An alarm log of up to 100 entries can be recorded\* at the beginning of the tape so that, even if the tape is ejected, the data is retained on the tape and can be reviewed when needed.

\* This function can be disabled.

### Series Recording

Several recorders can be cascaded to extend the total recording time. By utilizing the Series Recording function, recording can continue without interruption – as soon as one unit finishes recording, the next unit is automatically activated.

## Reliable Safety Features

### Quick-Recording Check

If the REC CHECK button is pressed when recording in time-lapse mode, the tape rewinds for approximately three seconds and then plays back for another four seconds. Upon completion of playback, the recorder then returns to its original recording mode.

### Power-Failure Protection

In the event of power failure, the SVT-RA168/RA40 recorder's built-in lithium battery supplies back-up power to retain the current time and setting modes in memory for up to 30 days.

### Warning Signal Output

If a recording is inadvertently stopped, the WARNING OUT terminal automatically generates a pulse signal.

### Tape-Use Frequency Check\*

This feature checks and records the amount of tape used at the beginning of the tape.

\* This function can be disabled.

### Video Loss Alert

A "VIDEO LOSS" message is displayed on the monitor whenever video input signals are lost during recording.

### Rec Out

During recording or when the recording is posed, the recorder outputs a pulse to allow users to know that the recorder is in recording mode.

### Automatic Head Cleaning

### Thread Check

### Clog Detection

### Tape End Out

### Security Lock Function

## User-Friendly Operation

- Rapid Fast-Forward and Rewind - 100 seconds for an entire T-160 tape
- Sharpness control for crisp picture reproduction
- Quick-start mechanism for smooth operation
- Excellent Time/Date Search Accuracy - 10-minute increments
- Alarm-List Recording – Record up to 100 alarms of data showing time and date of occurrence
- Real-time Display indicates real operating times in recording or stop modes
- On-screen display available in English, French and Spanish
- Built-in time and date generator
- Remote control function with optional remote control unit
- Used time indicator
- Power saving mode
- Loop-through capability
- Camera switcher interface
- RS-232C/RS-485 interface with the optional SVT-RS100 interface board
- Alarm reset

## Specifications

	SVT-RA168	SVT-RA40
<b>General</b>		
Mass	4.1 kg (9 lb)	
Dimensions (W x H x D)	420 x 100 x 300 mm (16 5/8 x 4 x 11 7/8 inches)	
Power requirements	120 V, 60 Hz	
Power consumption	16 W	
Operating temperature	5°C to 40°C (41°F to 104°F)	
Operating humidity	80% or less	
Fast-forward/rewind time	Approx. 100 seconds (when using T-160 tape)	

### System

Video signal	EIA standard (monochrome) NTSC (color)	
Recording/playback system	Rotary four-head helical scanning system	
Tape speed	11.12 mm/s (6- or 8-hour mode)	
Recording/ playback time	T-120	6, 18, 30, 48, 72, 96, 120, 168 hours
	T-160	8, 24, 40, 64, 96, 128, 160, 224 hours
Horizontal resolution	Monochrome	350 TV lines or more
	Color	300 TV lines or more

### Video Input/Output

Input	BNC (1), 1 Vp-p, 75 Ω, unbalanced
Output	BNC (1), 1 Vp-p, 75 Ω, unbalanced
S/N ratio	44 dB

### Audio Input/Output

Audio recording system	Monaural
Input	Phono (1), -8 dBs, 27 kΩ, unbalanced
Output	Phono (1), -8 dBs, 600 Ω, unbalanced
Microphone input	ø 3.5 mm minijack (1), -60 dBs, 600 Ω
Distortion	Less than 4 %
Audio S/N ratio	43 dB

### Others

Alarm input	Low-level, terminal trip (1)
Alarm output	+5 V, 5.7 kΩ (low active), terminal trip (1)
Switch output	+5 V, 5.7 kΩ (low active), terminal trip (1)
Tape-end output/Series output	+5 V, 5.7 kΩ (low active), terminal trip (1)
Warning output	+5 V, 5.7 kΩ (low active), terminal trip (1)
External timer input	Low-level, terminal trip (1)
Recording output	+5 V, 5.7 kΩ (low active), terminal trip (1)
Alarm-reset input	Low-level, terminal trip (1)
Series input	Low-level, terminal trip (1)
Remote-control input	ø 3.5 mm minijack (1)

### Supplied accessories

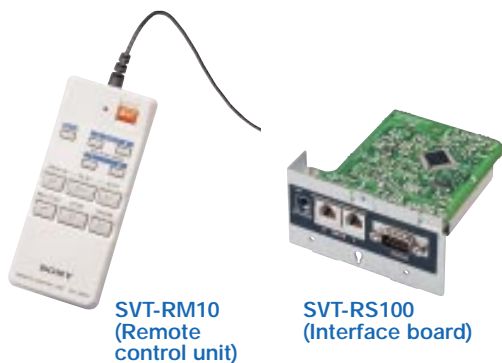
	Operation manual (1), AC power cord (1)
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### Optional accessories

SVT-RM10	Remote control unit
SVT-RS100	Interface board

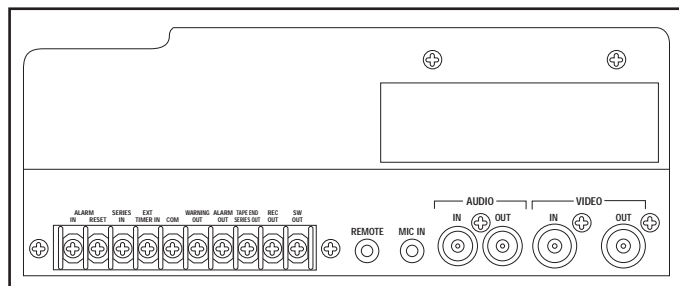


Front Panel



SVT-RM10  
(Remote  
control unit)

SVT-RS100  
(Interface board)



Rear Panel

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