

# ***VERITY SYSTEMS***

## **TECHNICAL MANUAL**

**Operating & Maintenance  
instructions for**

**SV90 DEGAUSSER**

# SV 90 Bulk Tape Degausser

## Operating Manual

### Production Standard

Document No. M/000094

**Warning**            To help minimise the possibility of electrical shock hazards under no circumstances should any panels be removed

**Caution:**            *It is recommended that magnetic storage media is kept at least six feet from the degausser.*

*It is recommended that people with any form of heart pace-makers or implants etc. avoid close proximity to any equipment of this type without appropriate medical advice.*

*Before connecting to the mains supply and operated the two transit bolts on the exterior sides of the unit at the rear must be removed by rotating anticlockwise and withdrawing*

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This manual refers to SV90 Degausser  
Part No. ZZ 009 022

# SPECIFICATION

**Tapes** Any reel up to 1" wide by up to 16" diameter with NAB compatible hubs. (Tapes up to 1500 Oersteds)

**Cassettes** See Options. (Tapes up to 1500 Oersteds)

**REFER TO MAGNETIC MEDIA REFERENCE GUIDE**

## DEGAUSSING SPECIFICATIONS

**Cycle Time** Less than 63 seconds

**Capacity** 40 reels per hour

**Operational voltage** 240v 50Hz

**Current** 10 amps typical

**Mounting** Free standing table top

**Dimensions**  
Height: 285mm  
Width: 520mm  
Depth: 689mm

**Weight** 35Kg

## OPTIONS

### For SV90 Degausser

**Cassette Carriers for**

Beta SP, MII, R DAT, 8mm, VHS, U-matic, 6mm,  
TK50, Betacam, 3480, DC600, DC1000, Audio cassettes

**Hub Adaptors for**

Cine Hub  
DIN Hub (1/4" reels)

# 1. GENERAL

The Verity Systems automatic Bulk Tape Degausser operates from a 240v 50Hz supply and has a cycling rate of typically 55 seconds with a total capacity of 40 reels per hour.

The SV90 will handle any reel up to 16" diameter by up to 1" width with a NAB hub, and is entirely suitable for both video and instrumentation recording formats using high energy tapes.

Various options are available to enable the degausser to accommodate different spool hubs and a large variety of cassettes and cartridges. (See previous page).

## 2. INSTALLATION

### 2.1. Unpacking

Unpack the degausser carefully and inspect it for signs of physical damage. If damage is apparent, a claim should be filed with the carrier.

### 2.2. Power Wiring

Power connection is made to the SV90 via the heavy duty flying cable at the rear of the unit. The power circuit to the degausser should be rated in accordance with the national and local electric codes. The SV90 operates from specific supplies. Check for compatibility.

**Caution**

***A good electrical ground must be connected to the degausser. The unit must be connected to the correct power supply. Failure to do so may result in permanent damage.***

Lead Colour	Ident	Connection
Brown	Live	240/220/200v
Blue	Neutral	0v
Green/Yellow	Earth	Earth

## Note

### Degausser Current Consumption

The degaussing coils are powered as part of a tuned resonant circuit. This allows quite high circulating currents to be generated within the degaussing coils, with minimal current consumption from the mains voltage supply. However, this technique requires that the waveform of the supply voltage contains minimal harmonic distortion. A distorted waveform will result in an increase in current consumption.

The typical current consumption figures provided in this manual are powered from a supply with minimal distortion. Any increase in current consumption due to a distorted waveform will have minimal effect on the degausser performance, however, excessive current consumption should be avoided for obvious reasons. In the event of unexplained high currents, please consult your supplier.



### **3. METHOD OF OPERATION**

Connect the equipment to the mains supply. Fans are provided for forced air cooling. These are thermally controlled and therefore switch on and off as required.

To operate the degausser, open the drawer by pulling up on the latch and remove the reel hub clamp by rotating it anticlockwise. Place the reel onto the turntable and replace and tighten the reel clamp by rotating it clockwise. Close the drawer and push it firmly shut.

Press the red power button which will latch in and illuminate, then press the Degauss button and hold for approximately one second. The button will illuminate and the degauss sequence will commence.

When the tape is fully degaussed the degauss light will extinguish and the drawer may be opened and the reel removed.

Further reels may be degaussed by simply repeating the sequence. At the completion of degaussing, switch off the equipment by pressing the red power button to unlatch it.

If at any time during the erasure cycle the drawer becomes unlatched, a fail safe mechanism will automatically inhibit the cycle. If this occurs simply re-latch the drawer and press the degauss button to restart the cycle.

## 4. CASSETTE OPTION

With the addition of specific cassette carriers a wide range of cassettes may be erased in the SV90. The cassette carriers vary only in size, therefore the method of adaption and operation is identical in each case.

### 1. Cassette Carrier Fitting Procedure

- a. Slide open the drawer.
- b. Remove the standard NAB hub clamping ring from the turntable.
- c. Lower the cassette carrier onto the turntable, turn the knurled nut ensuring it engages the thread on the fixing stud. Tighten the nut making sure that the 'U' section of the carrier correctly locates on the turntable.

### 2. Cassette Erasure Procedure

- a. The cassette carriages carry 2 cassettes.
- b. Locate one end of the cassette in the carriage and pull the spring latch at the other end to allow the cassette to enter. The cassette should be placed the correct way up, ie with the cassette window uppermost.
- c. Ensure that both the spring latches are correctly positioned on the cassette ensuring it is constrained from any movement.  
  
Close the drawer and push it firmly shut.
- d. Degaussing of the cassette is then carried out using the standard procedure.

## 5. CINE HUB OPTION

### 1 Cine Reel Erasure Procedure

- a. Slide open drawer.
- b. Remove any existing SV90 hub clamps.
- c. Place the cine reel onto the SV90 hub taking care that the drive pin is located in the reel slot.
- d. Place the cine adaptor on top of the reel and, using the knurled nut, secure the reel.
- e. Degaussing of the reel is then carried out using the standard procedure.

## **6. 1/4" REELS WITH DIN HUB OPTION**

- a.** Slide open the drawer.
- b.** Remove any existing SV90 hub clamps.
- c.** Place the reel onto the SV90 hub and secure using the DIN hub clamp.
- d.** Degaussing of the reel is then carried out using the standard procedure.

## 7. SERVICING

The equipment is protected by two fuses which are located at the rear of the unit, as detailed below.

		<b>Larger Fuse</b>	<b>Smaller Fuse</b>
ZZ 009 022	240v 50Hz	15 amp antisurge	2 amp quick blow

To replace either fuse rotate the cap in an anticlockwise direction and remove cap and fuse.

Renew fuse and replace cap into holder and tighten in a clockwise direction.

In the event of any failure not being resolved by replacement of the fuses the unit should be returned to **VERITY SYSTEMS** for repair.

***Any repair work other than that stated above which involves the removal of the equipment cover will render the warranty null and void***