



TECHNICAL MANUAL

**Operating and Maintenance
Instructions
for**

V880 MEDIAGAUSSER

V880 MEDIAGAUSSER

TECHNICAL MANUAL

Document No. M000252

Production Standard

WARNING TO HELP MINIMISE THE POSSIBILITY OF ELECTRICAL SHOCK HAZARDS UNDER NO CIRCUMSTANCES SHOULD ANY PANELS BE REMOVED

PLEASE NOTE: THE REMOVAL OF ANY OF THE EQUIPMENT PANELS WILL RESULT IN THE INVALIDATION OF THE WARRANTY

CAUTION IT IS RECOMMENDED THAT MAGNETIC STORAGE MEDIA IS KEPT AT LEAST TWO METRES FROM THE DEGAUSSER

IMPORTANT THE POWER ON/OFF SWITCH USED ON THIS EQUIPMENT IS NOT AN ISOLATING SWITCH. IT IS RECOMMENDED THAT THIS EQUIPMENT SHOULD BE OPERATED FROM A SEPARATE SWITCHED ISOLATOR.

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

Copyright

This document is the property of Verity Systems Limited and it may not be reproduced, copied, or exhibited to a third party without the written permission of Verity Systems

VERITY SYSTEMS LIMITED
Verity House
2 Eastern Road
Aldershot
Hampshire GU12 4TD
UK

VERITY SYSTEMS INC.
6346A Main Street
El Dorado
California
CA 95623
USA

Tel: +44 (0) 1252 317000
Fax: +44 (0) 1252 316555
E-Mail: sales@veritysystems.com
Web Page: <http://www.veritysystems.com>

Tel: 530 626 9363
Freephone: 1-800 642 5151
Fax: 530 626 9395

CONTENTS

SECTION		PAGE
	List of Contents (this page)	3
1	Specification	4
2	Introduction	5
3	Installation	6
4	Operation	7
5	Indicators/Features	9
6	Maintenance/Servicing	10
7	Parts List	11

Circuit Diagrams

This document refers to V880 Mediagausser
Part Nos. ZZ 008 802 ZZ 008 803 ZZ 008 805

1. SPECIFICATION

V880 MEDIAGAUSSE

Depth of Erasure -75dB

Media (ZZ008802,803) S-VHS, VHS, Betacam, Betamax, Cassettes, Cartridges, Data DC 300, 600, 2000, 3480, 3490, TK50 & 70, BETA SP, MII, DAT.

(ZZ008805) DVC Pro

Power Requirements

Model	ZZ 008 802	ZZ 008 803	ZZ 008 805
Line Voltage	240-220v	208/220v	240-220v
Line Frequency	50Hz	60Hz	50Hz
Current (typical)	12.0 amps	12.0 amps	10.0 amps

Protection

Circuit Breaker 15 amps

Conveyor Belt Speed 4 ips fixed (50Hz)

Belt Width 6" (153mm)
3.3" (83mm) ZZ 008 805

Duty Cycle Dependent on ambient temperature and voltage variations - 25 minutes typical in the first hour.

Mounting Free standing table top

Overall dimensions
Length 40.2" (1,021mm)
Height 7.0" (177mm)
8.7" (220mm) ZZ 008 805
Depth 15.6" (395mm)

Weight 150 lbs (68Kg)

2. INTRODUCTION TO THE V880 MEDIAGAUSSE

The Verity V880 Mediagausser is designed for intermittent duty, single pass erasure of magnetic storage media. The conveyor belt transport permits a throughput of up to 1000 BETA SP cassettes per hour.

During the design stage of the V880 particular consideration was given to user efficiency; to maximise the media throughput in the minimum time with the minimum of fuss. It is these criteria which has led to several unique features incorporated in the V880.

The V880 utilises two **U** shaped degaussing coils mounted in a **V** formation which, extensive research has proven, gives optimum and consistent erasure of circular storage media with a single pass. Additional features include temperature sensors to monitor and control the maximum operating temperature of the degaussing coils, plus forced air cooling of the degauss coils to maximise the run time.

In the unlikely event of a fault occurring, over current protection is achieved using a combined power on/off switched circuit breaker. Last, but not least, the V880 is of rugged mechanical construction using high quality material throughout to ensure years of reliable use.

3. INSTALLATION

3.1. 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.

3.2. Power Wiring

Power connection is made to the V880 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 V880 operates from specific supplies, in the case of the 50Hz unit it is between 220 and 240v. The 60 Hz unit is preset for one of two supplies ie, 208v or 220v, The setting may be changed after having removed the rear cover. 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.**

Wire colour	240v 50Hz	220v 60Hz
Brown	Live	Hot
Blue	Neutral	Hot
Green/Yellow	Earth	Ground

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. In extreme cases excessive current will trip the circuit breaker, making it necessary to use a mains filter to remove the distortion and reduce the current consumption.

The typical current consumption figures provided in this manual are when 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.

4. OPERATION

The V880 mediagausser has been carefully engineered for convenience and simplicity of operation. The unit has a number of unique features which are outlined below.

The V880 uses forced air cooling and to ensure correct operation care should be taken to avoid restricting the air flow through the unit.

4.1. Power Switch

The power switch is of the rocker type and includes the over current circuit breaker function. It is the only control provided.

When the power switch is activated the conveyor belt drive and degaussing coils will be energised.

4.2. Product Erasure

The media to be erased is fed onto the degausser at the left end and exits at the right end.

Cassettes

VHS, Betacam and Betamax should be placed on the conveyor window down. (See Note 2)

BETA SP and S.VHS should be erased twice, once window side down and the second time window side up for optimum results.

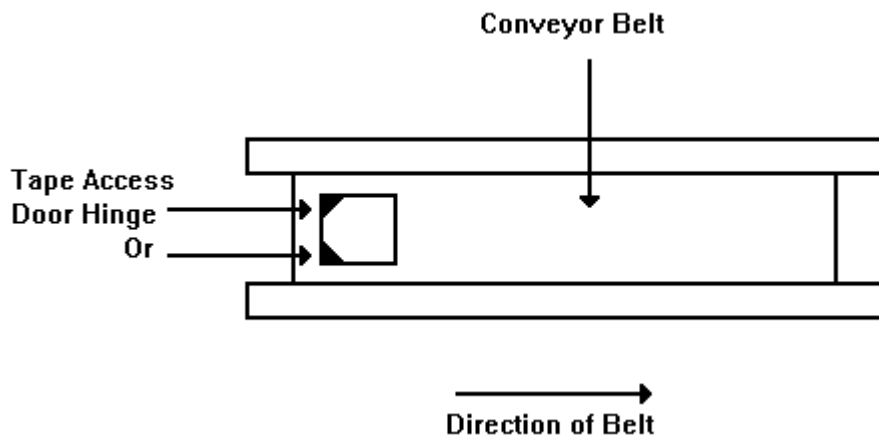
Cartridges

DC series should be placed on the conveyor window side down and 3480 series placed drive side down.

TK50 and TK70 cartridges must be placed on the conveyor belt with the tape access door hinge point trailing (see diagram on next page). Failure to do so may result in permanent damage to the degausser or cartridge.

Notes

- 1) Do not unplug the degausser when power is 'on'.
- 2) Due to variations in energy levels of professional tapes, it may be found desirable to subject some types to a second pass with tape window up.



DVC Pro cartridges must be passed through the degausser a second time having turned the cartridge over.

5. INDICATORS/FEATURES

5.1. Forced Air Cooling

The V880 contains three axial fans which maximise the operation time of the degauss coils. The fans are thermostatically controlled and will continue to run after the degausser is switched off. The fans will switch off after a short period when the degaussing coils have cooled.

Note

The extended fan run period may be increased substantially if the degausser is operated in a high temperature environment.

5.2. Overtemperature Sensors

Each of the degaussing coils is monitored for excessive operating temperatures and in such an event the degausser will be automatically switched off until the coils have cooled sufficiently. The V880 is specified for intermittent operation and the sensors will be activated in the event of excessive use. The belt drive motor and coil will automatically re-energise after having cooled sufficiently if the power switch is left 'ON'.

5.3. Conveyor Belt Speed

The conveyor belt is driven by an a.c. asynchronous motor, chain and sprocket system. The speed of the motor is fixed and no adjustment or maintenance is required.

5.4. Over Current Protection

The power ON/OFF switch provides both switch and over current circuit breaker functions.

6. MAINTENANCE/SERVICING

6.1. Cleaning

The degausser should be cleaned with a soft cloth moistened with a mild detergent solution. Abrasive pads or solvents should be avoided as permanent damage to the surface may result.

6.2. Servicing

The V880 degausser has been thoroughly checked for correct operation prior to leaving Verity Systems and should provide years of trouble-free operation. The conveyor belt drive system utilises sealed lubricated bearings and a brushless motor, both being normally maintenance free. In the event of equipment failure consult your supplier.

Warning

This equipment generates high voltages which are potentially fatal. Servicing should be carried out by qualified personnel only.

7. V880 MEDIAGAUSER

PARTS LIST 240v 50Hz
ZZ 008 802

Designation	Part No.	Description	Qty
	BB100020	Ball Bearing	4
	CA100041	Strain relief bush	1
	CA100219	Grom 12.3mm panel open	4
	CA100300	P clip 7.5mm	2
	CA200010	Cable, mains	1
C1-C8	CC100079	Capacitor 54.3µF	8
	CM100048	Term block multi tab 16A	1
	FM100027	Fan 120mm dia 240v	3
	FM100033	Fan Guard	3
M1	FM100093	Asyn geared mtr 115v 60Hz	1
	FM200083	Chain and link	1
	MP002124	Bearing collar	4
	MP002233	Chain sprocket (Large)	1
	MP002627	Chain sprocket (Small)	1
	MP002686	Roller	2
	MP002633	Spacer (Covers)	8
	MP002683	Rear cover	1
	MP002684	Front cover	1
	MP002685	Support Strip (front)	1
	MP002687	Chassis	1
	MP002688	Conveyor belt	1
	MP002694	Support Strip (rear)	1
RLY 1	RS100010	Solid State Relay	1
SW4	SW100013	Thermostat n/o 60 deg	1
SW2 & SW3	SW100016	Thermostat n/c 100 deg	2
SW1	SW100114	15A circuit breaker	1
TX1	TX100061	Transformer (conveyor mtr)	1
	XX001871	Foot	4
	XX002689	Belt support tray assy	1
L1	XX002742	Degauss Coil/sensor assy LH	1
L2	XX002743	Degauss Coil/sensor assy RH	1

V880 MEDIAGAUSER

PARTS LIST 220v 60Hz
ZZ 008 803

Designation	Part No.	Description	Qty
	BB100020	Ball Bearing	4
	CA100041	Strain relief bush	1
	CA100219	Grom 12.3mm panel open	4
	CA100300	P clip 7.5mm	2
	CA200010	Cable, mains	1
C1-C8	CC100079	Capacitor 54.3µF	8
	CM100048	Term block multi tab 16A	1
	FM100027	Fan 120mm dia 240v	3
	FM100033	Fan Guard	3
M1	FM100093	Asyn geared mtr 115v 60Hz	1
	FM200083	Chain and link	1
	MP002124	Bearing collar	4
	MP002233	Chain sprocket (Large)	1
	MP002627	Chain sprocket (Small)	1
	MP002686	Roller	2
	MP002633	Spacer (Covers)	8
	MP002683	Rear cover	1
	MP002684	Front cover	1
	MP002685	Support Strip (front)	1
	MP002687	Chassis	1
	MP002688	Conveyor belt	1
	MP002694	Support Strip (rear)	1
RLY 1	RS100010	Solid State Relay	1
SW4	SW100013	Thermostat n/o 60 deg	1
SW2 & SW3	SW100016	Thermostat n/c 100 deg	2
SW1	SW100114	15A circuit breaker	1
TX1	TX100061	Transformer (conveyor mtr)	1
	XX001871	Foot	4
	XX002689	Belt support tray assy	1
L1	XX002753	Degauss Coil/sensor assy LH	1
L2	XX002754	Degauss Coil/sensor assy RH	1

V880 MEDIAGAUSER

PARTS LIST 230v 50Hz
ZZ 008 805

Designation	Part No.	Description	Qty
	BB100020	Ball Bearing	4
	CA100041	Strain relief bush	1
	CA100219	Grom 12.3mm panel open	4
	CA100300	P clip 7.5mm	2
	CA200009	Cable, mains	1
C1-C8	CC100097	Capacitor 57 μ F	8
	CM100048	Term block multi tab 16A	1
	FM100027	Fan 120mm dia 240v	3
	FM100033	Fan Guard	3
M1	FM100093	Asyn geared mtr 115v 60Hz	1
	FM200083	Chain and link	1
	MP002124	Bearing collar	4
	MP002233	Chain sprocket (Large)	1
	MP002627	Chain sprocket (Small)	1
	MP002686	Roller	2
	MP002633	Spacer (Covers)	8
	MP003424	Rear cover	1
	MP003423	Front cover	1
	MP002685	Support Strip (front)	1
	MP002687	Chassis	1
	MP002688	Conveyor belt	1
	MP002694	Support Strip (rear)	1
	MP003417	Tape Guide	2
	MP003418	Top Cover	1
	MP003419	Entry Flap	1
	MP003420	Exit Flap	1
	MP003421	Spacer Plate	2
	MP003422	Hinge	2
RLY 1	RS100010	Solid State Relay	1
SW4	SW100013	Thermostat n/o 60 deg	1
SW2 & SW3	SW100016	Thermostat n/c 100 deg	2
SW1	SW100114	15A circuit breaker	1
TX1	TX100061	Transformer (conveyor mtr)	1
	XX001871	Foot	4
	XX002689	Belt support tray assy	1
L1	XX003427	Degauss Coil/sensor assy LH	1
L2	XX003428	Degauss Coil/sensor assy RH	1

Manufacturer: **VERITY SYSTEMS**

VERITY SYSTEMS LIMITED
Verity House, 2 Eastern Road
Aldershot, Hants, GU12 4TD, UK

Tel: +44 (0) 1252 317000
Fax: +44 (0) 1252 316555
E-mail: sales@veritysystems.com
Web Site: <http://www.veritysystems.com>

VERITY SYSTEMS INC
6236A Main Street, El Dorado,
California, CA 95623, USA

Tel: 530 626 9363
Fax: 530 626 9395
Freephone: 1-800 642 5151