

DVD-RAM MASTERING GENERATOR DA-3380

OUTLINE

DA-3380 is a signal source for making the master unrecord optical disc that satisfies the DVD-RAM standard. This unit provides the signal to make the all areas (embossed data area and rewritable area) of DVD-RAM disc in accordance with data from the panel switches and the serial interface and supplies the signal to the optical cutter.

FEATURES

Generate the embossed data

The unit automatically generated the signal to make the Pre-Pit (embossed data) for the Inside circumference on the DVD-RAM disc by connection with personal computer (RF-1st signal).

Record the groove and the pit of header part by the single beam one sequence

The unit provides the RF-2nd signal to make the Header-Pit for rewritable area and the Deflect signal to make the groove on the DVD-RAM disc.

Pulse width variable function

The pulse width variable function is provided to optionally correct the pulse width of the RF signal in accordance with characteristics of the optical cutter.

Automatically generates the signal

The unit automatically generates the signal for cutting the disc from the inside circumference to the outside circumference.

Output voltage arbitrary set function

The output voltage is arbitrarily set in accordance with each pulse in the RF signal.

Applicable to 450 rpm and 900 rpm

The unit can be used with the optical cutter of the rotation speed 450 rpm and 900 rpm.

Option
Applicable to 4.7 Gbytes

SCSI



REQUIREMENT FOR OPTICAL CUTTER

Dual beam drive

It is necessary to drive two laser spots to record the data in the embossed data area and rewritable area.

LOCK signal

The rotation control function of CAV is necessary follow the reference signal from the unit.

START signal

Beginning of the signal generation is detected from the radius position of the disc and the function to output the beginning timing to the unit is necessary.

SPECIFICATIONS

RF-1st signal (embossed area output) and RF-2nd signal (rewritable area output)

Output range(TOP)	Variable at 0 ~ Approx.+1.0V
Output range(BOTTOM)	Variable at 0 ~ TOP level
Setting resolution	2mV
Output impedance	Approx. 50 Ω
Transmission clock	RF-1st : 5.22MHz(450 rpm) RF-2nd: 5.50MHz ~ 12.94MHz (450 rpm)
Frequency accuracy	20ppm or less
Residual jitter	1ns or less
Rise time and fall time	5ns or less
Pulse width variable function	
Setting range	Approx.-1T ~ Approx.+20ns
Setting resolution	2ns
Automatic switch at output level	
Switch by each T	3T ~ 14T

Deflect signal (groove signal + header position control signal)

Groove signal

Output range	Variable at 0 ~ Approx.200mV Sine wave
Setting resolution	1 mV
Output impedance	Approx.50 Ω
Output frequency	29.58kHz ~ 69.57kHz(450rpm)
Frequency accuracy	20ppm or less
Distortion rate	1% or less(20mV ~ 200mVp-p)
Groove end position correction	
Variable range :	3T ~ 7T(Standard value 5T)
Setting resolution :	0.5T
Output polarity switch	output polarity is reversed

Header position control signal

Output range	Variable at 0 ~ Approx. \pm 500mV, pulse signal
Setting resolution	2mV (Possible to set positive and negative individually)
Rise time and fall time	20ns or less
Output position adjustment (ID1,2) :	0 ~ + 4T in end position of groove, 0.5T step
Output position adjustment (ID3,4) :	0 ~ + 4T in end mark of ID2, 0.5T step

START/STOP signal (input)

Input impedance	Approx.47 k Ω
Proper pulse width	10ms or less
Logical polarity	Active low

LOCK signal (output)

Output	Line driver signal (pulse signal)
Output impedance	Approx.50 Ω
Output frequency	15.75kHz
Frequency accuracy	20ppm or less
Duty ratio	50 \pm 10%

Power source	100 ~ 240 VAC, 50/60 Hz Approx.16 W
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Case dimensions	190 (W) \times 128 (H) \times 350 (D)mm (projections not included)
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Weight	Approx. 3.6 kg
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