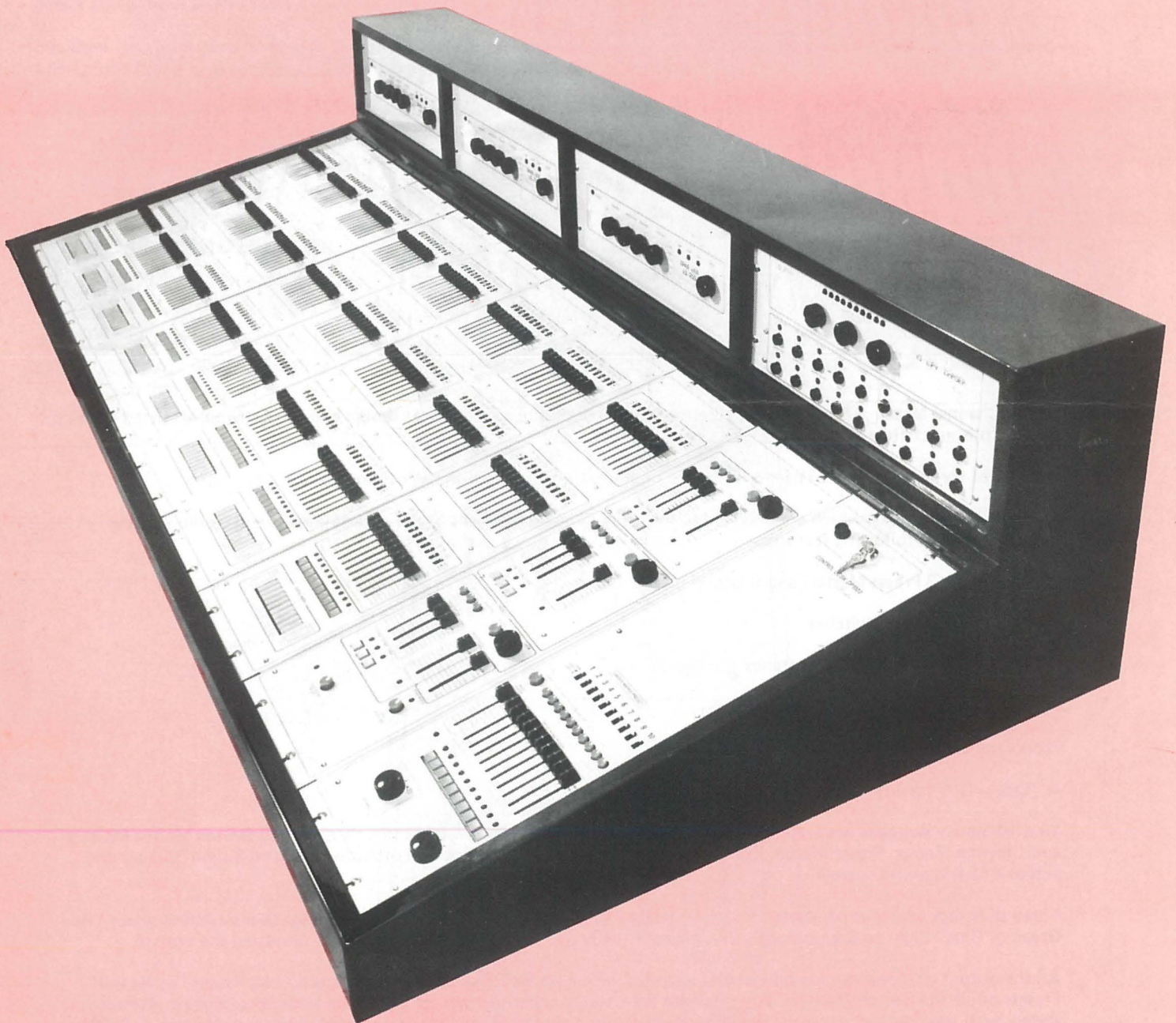


MALHAM
CHANNEL MASTER
3 PRESET
LIGHTING CONTROL DESK

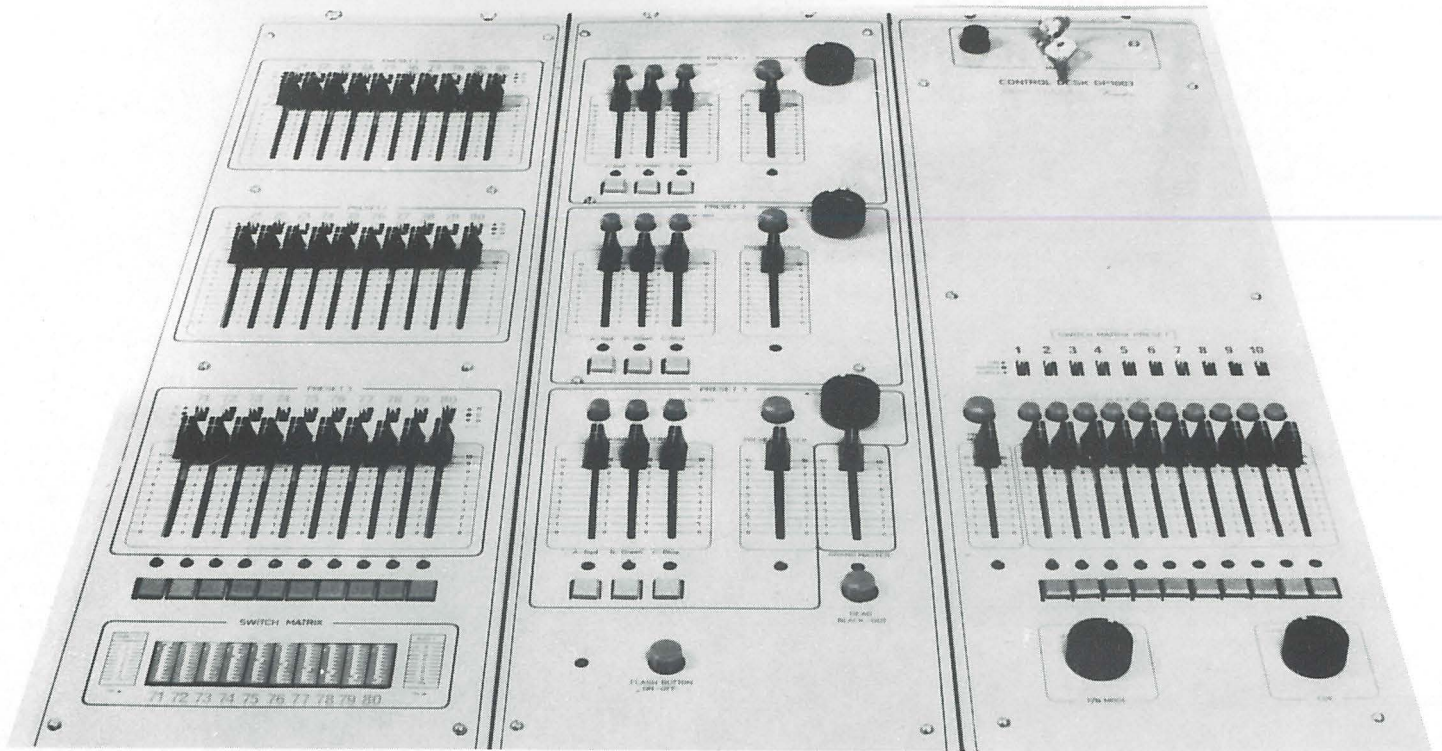


MALHAM LTD., 65/67 MALHAM ROAD, LONDON SE23
Telephone 01-699 0917

MALHAM

CHANNEL MASTER 3 PRESET

LIGHTING CONTROL DESK



The Malham Channel Master 3 Preset remote dimmer control desks are of a modular design and can be supplied fitted with up to 90 dimmer output channels.

An admixture of three basic control panels is used to build up the required number of dimmer outputs.

These versatile control desks, which are designed to meet the demanding needs of the entertainment and studio lighting industries, embody the following features:—

- * Grand Master, 3 Preset Masters and 9 Group master faders.
- * Interrelated Black out switches.
- * "Touch to full" flash button switches.
- * "Touch to level" flash button switches.
- * Proportional L.E.D. indicators.
- * A "Cue — Go" facility with L.E.D. mimics.
- * 10 x 10 Matrix switches with related "On, Auto 1, Auto 2" slide lock switches together with 10 Switch Matrix Masters and 1 Switch Matrix Preset Master give complete control over the distribution of Auto "Light to Sound" signals and acts as a fourth preset system.
- * Three slide lock switches per dimmer channel select "A, B or C" or with three simple change over switches, select "Red, Green or Blue" Light to Sound signals thus giving an effective 9 cue arrangement without re-setting the presets.
- * All the output channels can be individually supplied with automatic light — sound signals by two routes i.e. via the Presets or via the Switch Matrices. Any Malham light/sound controller can be used to provide these signals. Attractively styled, with well laid out controls, the illustration shows a typical 80 channel desk fitted with three Malham L.S. 205 (three channel Light to Sound) controllers and one Malham 10 channel (light to sound) controller.

Designed for use with Malham Thyristor dimmers, which are suitable for inductive or resistive loads, the "full on" + 12 volt D.C. output signals are compatible with most dimmer installations.

For touring or permanent installations the Malham Channel Master 3 Preset Lighting Control Desk is an obvious choice.

A fully documented technical specification is available on written request.

DESCRIPTION OF STANDARD MODULES

Master Control Module

In this panel a Grand Master fader governs the signal level to the Preset Masters and thus controls the whole desk.

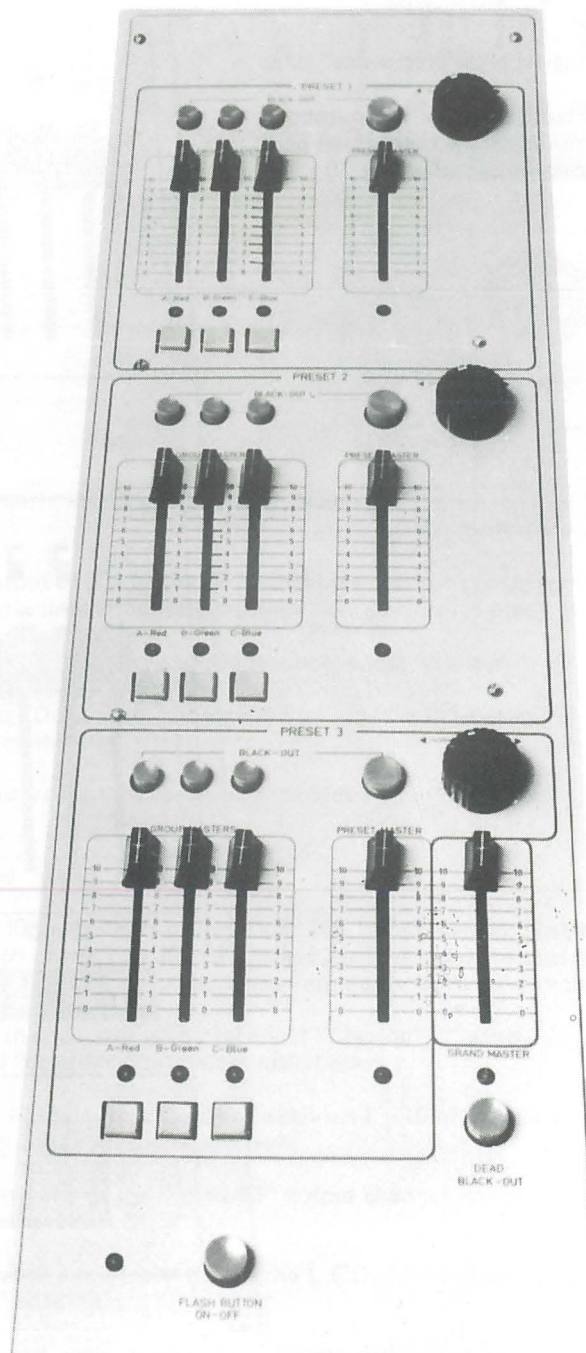
Each Preset Master controls the signal level to its associated Group Masters which, in turn, control the faders switched on to its group line. All these master faders have associated "Black Out" switches and proportional L.E.D.'s which vary in brightness indicating the signal strength at that point.

Fitted below each of the 9 Group Masters are "Flash to Full" touch buttons.

Each Preset has a "Normal - Auto" switch which can change the "Normal" A.B.C signals to "auto" Red, Green, Blue signals derived from the L.S. 205 (3 channel, light to sound) controller. Both "normal" and "auto" signals are controlled by the preset and group master faders.

Facilities for connecting three L.S. 205 controllers - one to each preset - are provided. By this means Chasing, Sound to Light, Autocycle and Static on signals are available simultaneously.

Located on this panel is the "De-activating" switch for the individual channel "touch button" switches.



Three Pre Set 10 Channel Output Module

This panel is fitted with 30 faders arranged in the configuration of 3 Pre Sets giving 10 output channels.

Each fader is clearly graduated to facilitate preparation of "light level" cue sheets.

Above each fader a three position slide lock switch "A.B.C." links the fader to one of three group master lines. In this way each output channel can be directed to one of nine group masters, giving a 9 cue facility backed by a 3 Pre Set master arrangement.

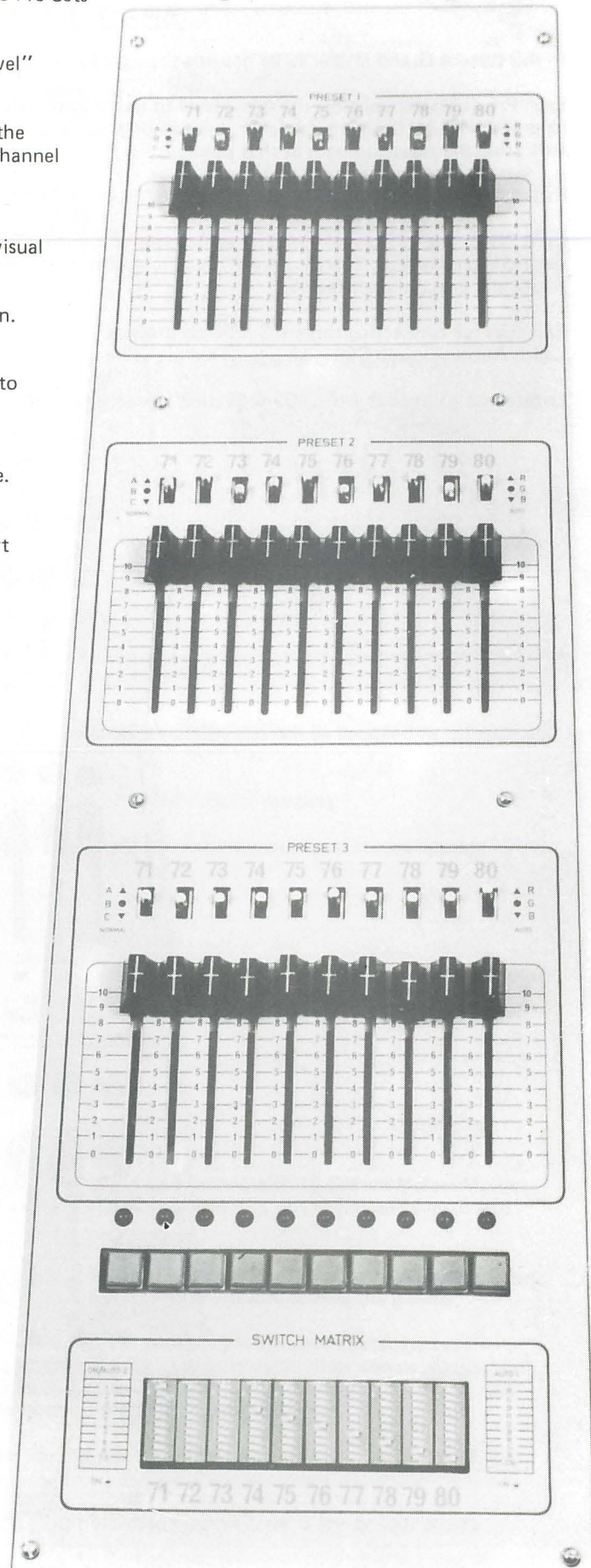
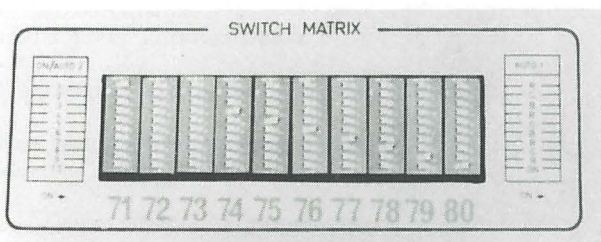
Each of the 10 output channels has a proportional L.E.D. giving a visual indication of the individual output level.

Each output channel has an overriding "Flash to Full" touch button. A facility for de-activation is provided.

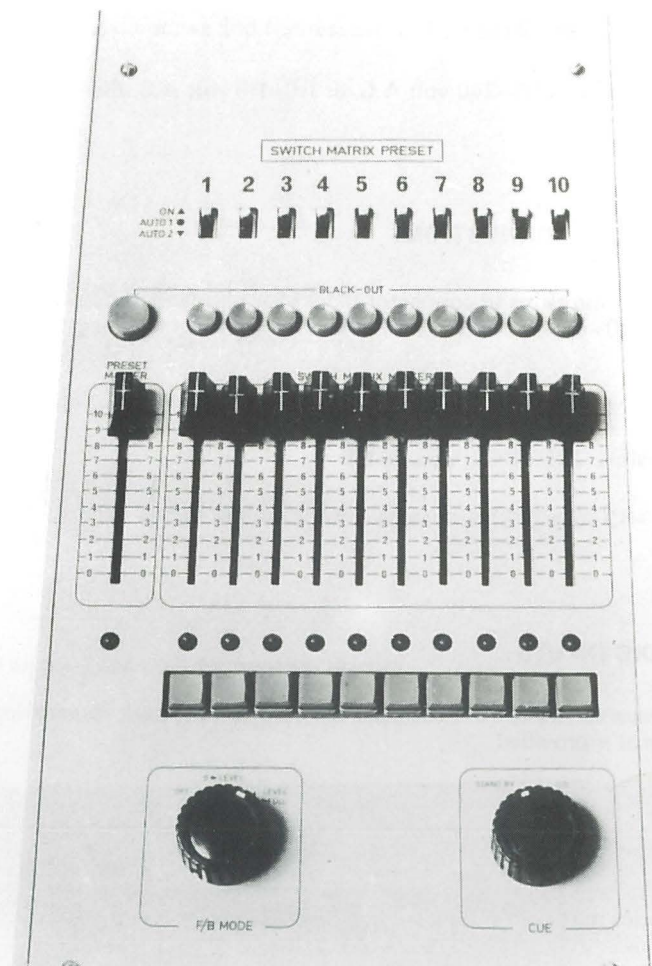
A 10 x 10 switch matrix allows any one of the 10 output channels to be connected to any one or more of the 10 switch matrix master lines.

The signals to any dimmer obey the "highest takes precedence" rule.

Multiples of these modules are used to build a desk of any output capacity up to 90 channels. The illustration on the right shows part of an 80 channel desk, and below is a photograph of a 10 x 10 switch matrix.



10 Channel Switch Matrix Module



This panel is fitted with 10 switch matrix masters and a switch matrix pre set master which is controlled by the Grand Master of the desk.

Each of the 10 masters varies the output of one of the 10 Switch matrix lines. Using the switch matrix, to switch selected dimmer outputs to these switch matrix lines, effectively creates a desirable fourth preset feature.

All the masters have associated Black out switches and proportional L.E.D. displays.

A three position switch which selects "De activate" "Level to Full" or "Flash to Level" is linked to 10 touch button switches located below the 10 switch matrix masters.

Above each of the switch matrix masters is a three position slide lock switch ("On, Auto 1, Auto 2") which selects the input to that particular switch matrix line.

The "On" position injects the normal "static" condition.

"Auto 1" injects on Matrix lines 1 – 10 the outputs of three L.S. 205 (three channel, light to sound) controllers and the tenth line receives a static "On" signal. Each of the L.S. 205 controllers has four modes of operation: (a) Sound activated (b) Chase (c) Autocycle (d) Static "On". Speed of chase, direction, audio response and master dim controls are also provided.

In the "Auto 1" position, therefore, the operator is able to blend "Chasing", "Sound Activated", "Autocycle" and "Static" signals without utilising any of the 3 Preset facilities on the main desk.

"Auto 2" injects on Matrix lines 1 – 10 the output signals of channels 1 – 10 of a Malham 10 way (light to sound) controller which has speed, direction, pattern and audio response controls.

This means that via the switch matrices any of the "up to 90" output channels can be switched to any of the 10 beats of the controller.

A Cue (Standby-go) switch is provided to allow a preview on the L.E.D. mimic display. The cue switch does not interrupt the signal to any channel set to the "on" position.

A Key switch, with an associate fuse and neon, isolates the complete desk.

TECHNICAL SPECIFICATION

SUPPLY VOLTAGE

Single phase, 220–240 volt A.C. or 110–115 volt A.C. 50–60 Hz. 5 amps. All power packs are fully stabilised. Protection by a 5 amp fuse.

CONTROL CONNECTIONS

Via fanning strips to connector blocks for permanent installations or through 12 way multi-pin plugs and sockets for touring. Pins 1/10—channel outputs. Pin 12—common reference negative.

DIMMER CONTROL VOLTAGE

0 to + 12 volts D.C. with cable runs up to 100 metres.

AUDIO INPUTS

Malham controllers are designed to accept 2 volt, peak to peak input signals or a crystal microphone input signal. Audio response control is provided.

LIGHT TO SOUND CONTROLLERS

Various models are available for use with the Channel Master. It is necessary for the controllers to have 0 to + 12 volt D.C. output signals.

Write for detailed specifications of Malham controllers.

FINISH

Consoles are manufactured from Zintex sheet and finished in textured enamel.

Panels are finished in Satin Black and with White lettering.

DIMENSIONS:

Max. depth	990mm
Max Height	480mm
Width Depends on number of outputs 30 channel	1070mm

Add 205mm per 10 channels.

CUSTOM DESIGN

Particular applications may not require some of the features incorporated in these modules. In this case items can be omitted.

Similarly, it may be required to include additional circuitry for special effects i.e. Smoke machines, Effects motors etc., Such requirements present no problem and the cover illustration shows a typical addition of 18 switches for remote relay operation.

Our design staff will be pleased to advise on suitable modifications.

MALHAM THYRISTOR DIMMERS

A range of 2 kw. and 5 kw. dimmer modules are available to suit resistive, inductive and fluorescent loads. These dimmers are fully protected to minimise mains borne and R.F. interference.

These dimmers can be assembled in a variety of cabinets.

Two models are particularly suitable for use with the Channel Master.

Model 10 x 2kw.

This cabinet is provided with a single phase 100 amp mains isolator and ten 10 amp MCB isolators.

Ten 2kw. dimmers, each provided with 10 amp HRC fuses are mounted on two 483 x 178mm panels.

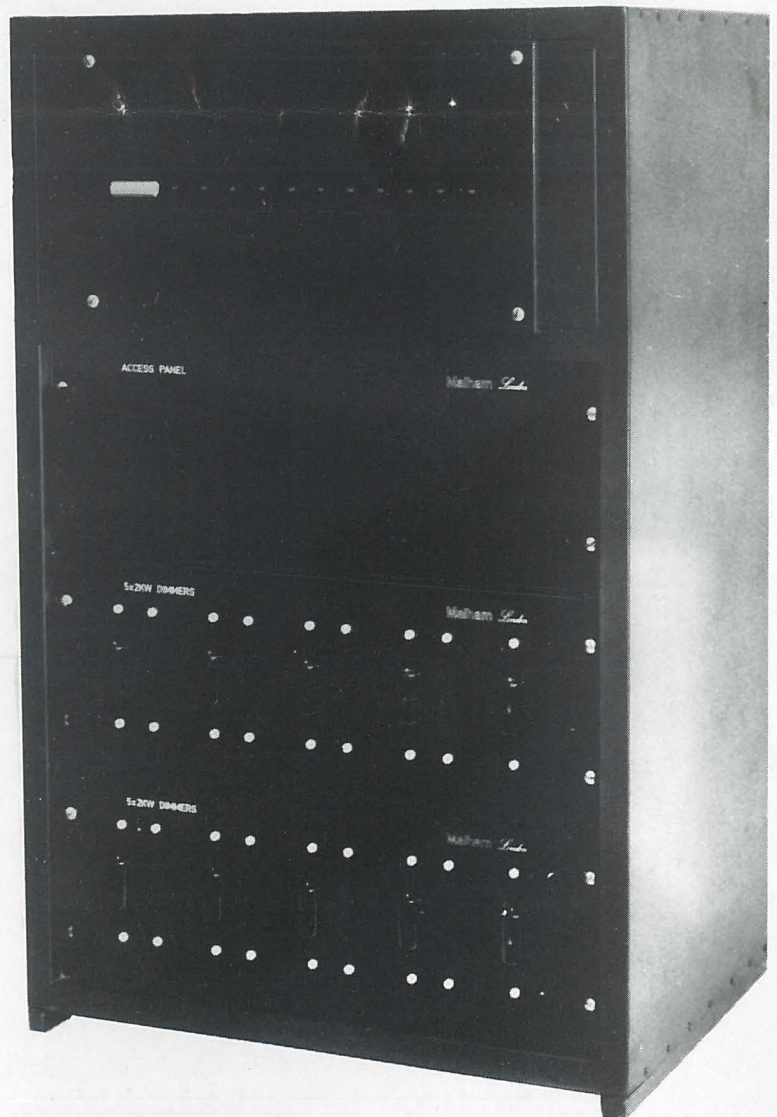
Dimensions: 850 x 533 x 381mm

Model 30 x 2kw.

This cabinet is provided with three 100 amp isolators and is thus suitable for three phase installations. Thirty individual 2kw. dimmers, protected with thirty 10 amp MCB and thirty 10 amp HRC fuses, are mounted on 673 x 178mm panels in groups of five.

Dimensions: 1917 x 724 x 381 mm

Note: For non permanent installations 13 amp or similar output sockets can be fitted to both Models.



CHANNEL MASTER 3 PRESET and DIMMER EQUIPMENT

As used in the most up to date
INDEPENDENT BROADCAST
VIDEO STUDIO IN THE U.K.

HADMORE PRODUCTIONS

(CINATRA'S, CROYDON, LONDON)

Approved by I.B.A. and A.C.C.T.

MALHAM LIMITED.
65/67 Malham Road,
London, S.E.23.
Tel. No. 01-699 0917

77 78 79 80

▲ R
● G
▼ B
AUTO

ET 2
76 77 78 79 80

▲ R
● G
▼ B
AUTO

77 78 79 80

▲ R
● G
▼ B
AUTO

PRESET 1

BLACK-OUT

GROUP MASTERS

PRESET MASTER

A-Red B-Green C-Blue

PRESET 2

BLACK-OUT

GROUP MASTERS

PRESET MASTER

A-Red B-Green C-Blue

PRESET 3

BLACK-OUT

GROUP MASTERS

PRESET MASTER

GRAND MASTER

DEAD BLACK-OUT

A-Red B-Green C-Blue

CONTROL DE

SW

1 2 3

ON ▲
AUTO 1 ●
AUTO 2 ▼

PRESET MASTER

FLASH BUTTON

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