

MSW-M2100P/1

MPEG IMX[™] Digital Multi Player, 50Mb/s MPEG-2 data compression, ½" tape transport, Memory Stick slot.



Enabling the present, protecting the past.

MPEG IMX is an established family of linear and disk-based products from Sony for the production, playout and storage of programme material at up to 50Mb/s MPEG-2 4:2:2P@ML.

The MSW-M2100P/1 MPEG IMX Studio Player combines the high picture quality of 50Mb/s MPEG-2 data compression with a rugged and reliable $\frac{1}{2}$ " tape transport.

Designed for programme productions such as drama, sports and natural history, the MSW-M2100P/1 provides eight channels of uncompressed digital audio, making it ideal for multi-lingual and multi-channel operation.

In addition to compatible replay of Betacam SX cassettes, the MSW-M2100P/1 can also replay Betacam, Betacam SP and Digital Betacam tapes, providing an elegant migration of existing systems to the open world of MPEG-2.

Features

525/625 switchable for international operations.

Material can be replayed by the MSW-M2100P/1 in 525 or 625 mode, and your 525 and 625 Betacam, Betacam SP, Betacam SX, MPEG IMX and Digital Betacam tapes can all be replayed.

Uncompromised editing performance.

Betacam-family VTRs have been setting the standard for fast accurate linear editing for many years, and we have incorporated all your favourite features into the MSW-M2100P/1. That means: edit playback to +/- 0 frame accuracy, variable speed replay from -1 to +3, superb jog audio performance and picture search at up to 78 times normal speed.

Streamlined design for installation where space is limited.

The MSW-M2100P/1 measures just four rack units in height – a reduction of 20% compared with conventional Betacam SP VTRs. That's especially useful for

installation into Outside Broadcast vehicles or smaller edit suites.

Easy integration into your existing Sony Cart system.

You don't need to replace your existing Sony LMS and Flexicart to migrate your operation to MPEG-2. The MSW-M2100P/1 can be installed at minimum cost, bringing the peace of mind of $\frac{1}{2}$ -inch linear "on-air" operation without the need for a painfully large investment.

"Shot Mark" system to speed up the editing process.

The MSW-M2100P/1 can recognise "Shot Marks" on an MPEG IMX and Betacam SX cassette. These marks can be added by the camera operator during shooting, and are used to indicate which shots are "good" or "bad". This allows the editor to quickly locate good material on a cassette, to really speed up post-production.

Memory Stick slot for rapid configuration.

A Memory Stick slot is located at the front of the MSW-M2100P/1. This can be used to store the operational set-up parameters of the machine. This feature can be especially useful where a large number of machines have to be configured identically, perhaps at a hire company where recorders need to be configured back to default settings upon return from hire to customers.

Lossless transfer of MPEG-2 data via the Serial Data Transport Interface – Content Package (SDTI-CP)

The Serial Digital Transport Interface – Content Package (SDTI-CP) lets you transfer MPEG-2 4:2:2P@ML data at 50Mbps Intra-frame to other devices without any degradation of picture quality. Furthermore, SDTI-CP has been standardised by the Society of Motion Picture and Television Engineers (SMPTE) as SMPTE 326M, and its use is becoming widespread.

Longest ever playback duration from a Sony ½" broadcast player

The MSW-M2100P/1 provides a replay duration of up to 220 minutes from a single cassette. This provides

the duration necessary for long productions, and makes MPEG IMX great for the distribution of feature films. No other ½" broadcast player from Sony has ever offered this duration of playback. Even with a small cassette, up to 71 minutes of material can be replayed.

Metadata ready

The use of metadata is set to revolutionise the generation, storage and management of programme content. The MSW-2000P/1 Series has been designed to operate in the broadcast systems of today and tomorrow, and space has been reserved within the recording format for the storage of metadata. Furthermore, metadata (UMID) can be output from the MSW-M2100P/1 via the SDI and SDTI-CP interfaces and can be read via the 9-pin connector.

High-speed data transfer from MPEG IMX cassettes.

High-speed data transfer from MPEG IMX cassettes was an optional feature in the MSW-M2100P. With the new MSW-M2100P/1, this feature is provided as standard, bringing increased efficiency to the programme production process.

Benefits

The picture quality you need for the most demanding programme productions

MPEG-2 4:2:2P@ML data compression at 50Mb/s intra-frame is used for the video signal. This compression standard has been recognised by the European Broadcast Union (EBU) as one of the compression families upon which future broadcast systems should be built. Not only does it provide the picture quality required for programmes such as drama, natural history and sport, but it also offers superb multi-generation editing performance for complex productions.

Audio performance for the new digital broadcast era

For multi-lingual or surround sound applications, there is often the need to use more than the usual four channels of digital audio common to most devices. With the ability to switch between 4 channels of 48kHz AES/EBU digital audio at 24 bit resolution, or 8 channels at 16 bits, you can optimise the audio quality and number of channels for each programme production.

Widescreen operation for future-proof recordings

With widescreen production now the norm rather than the exception, the ability to replay 4:3 or 16:9 pictures - automatically - ensures a long shelf-life for your programme.

Easy migration from existing infrastructures

You can replay all your existing Betacam, Betacam SP, Betacam SX and Digital Betacam cassettes into a 50Mb/s MPEG-2 digital environment, generating continued revenue from archived material. Compatible replay of Betacam SX tapes brings the option of incorporating Betacam SX material into your 50Mb/s MPEG-2 programme.

Peace of mind even for the toughest operating environments

Betacam SP, Betacam SX and Digital Betacam recorders are in continuous use feeding thousands of "onair" channels 24 hours a day. You can relax in the knowledge that the same meticulous design standards have been built into MPEG IMX Studio Players.

Familiar operation and design

Retraining technical and operational people can be a time-consuming business. The operational controls and mechanical design of the MSW-M2100P/1 have been derived from existing players such as Digital Betacam, and will be familiar to your technical and creative colleagues.

Big reductions in maintenance cost

Users everywhere are looking to reduce the long-term cost of running analogue edit suites. With the MSW-M2100P/1, cost reductions can be realised from day one. Not only do

MSW-M2100P/1 machines offer stunning picture and sound performance, but the rotary video heads cost significantly less and are quicker to replace than those on your Betacam VTRs.

Freedom to mix and match products from all your favourite suppliers

All the video interfaces you expect from a broadcast player are provided as standard on the MSW-M2100P/1. Additionally you can transfer MPEG-2 data at 50Mb/s without signal degradation via the Serial Data Transport Interface – Content Package (SDTI-CP). This interface is common to a wide range of products from many manufacturers, so you can easily integrate the MSW-M2100P/1 into your current or new system with total confidence.

Technical Specifications

| Power Requirements: | AC 100 V to 240 V, 50/60 Hz |
|------------------------|---|
| Power Consumption: | 200 W (215 VA)/AC 240 V |
| Operating Temperature: | +5C to +40C (+41F to +104F) |
| Storage Temperature: | -20C to +60C (-4F to +140F) |
| Humidity: | 20% to 90% (relative humidity) |
| Mass: | Approx. 22 kg |
| Dimensions: | 427 mm x 174 mm x 550 mm |
| Replay Formats | MPEG IMX Betacam Betacam SP Betacam SX Digital Betacam: |
| Replay Duration | Up to 220 minutes with L- cassette Up to 71 minutes with S- cassette |

| Video Input Signals | |
|------------------------|-----------------------|
| Analogue reference | BNC with loop through |

| Video Output Signals | |
|-------------------------|--------------------------------------|
| Analogue composite | 3 x BNC (one with character display) |
| Analogue component | 3 x BNC (Y, R-Y, B-Y) |
| SDI | 3 x BNC (one with character display) |
| SDTI-CP | 2 x BNC |

| Audio Output Signals | |
|-------------------------|--|
| Analogue audio | 5 x XLR 3-pin (CH 1 to 4 and CUE) |
| Digital Audio (AES/EBU) | 4 x BNC (CH1/2, CH3/4, CH5/6 and CH7/8) |
| SDI | 3 x BNC |
| SDTI-CP | 1 x BNC (CH1 to 8) |
| Time Code | 1 x XLR 3-pin |
| Monitor output | 2 x XLR 3-pin |

| Remote Control | |
|-----------------|-------------------|
| RS-422A IN | D-sub 9-pin |
| RS-422A OUT | D-sub 9-pin |
| RS-232C (ISR*) | D-sub 9-pin |
| Video Control | D-sub 15-pin |
| Control Panel | Round type 10-pin |
| Parallel Remote | D-sub 50-pin |

*Interactive Status Reporting

| Supplied Accessories | |
|-------------------------------------|--|
| Installation Manual | |
| Operation Manual | |
| 4 Rack Mount Screws (PSW 4 x 16) | |

Accessories

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BKMW-101

Remote control panel for MSW-2000 series MPEG IMX VTRs $\,$



BKMW-103

Control panel extension kit



BKMW-102

Control panel case for remote VTR control panel

Tripods



RMM-131

RACK MOUNT KIT FOR UVW,DSR AND MSW