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# Rental System for Different Digital Consoles
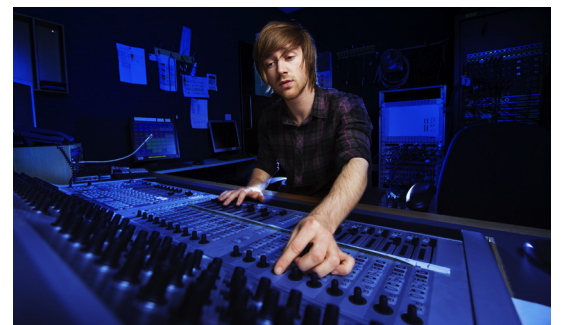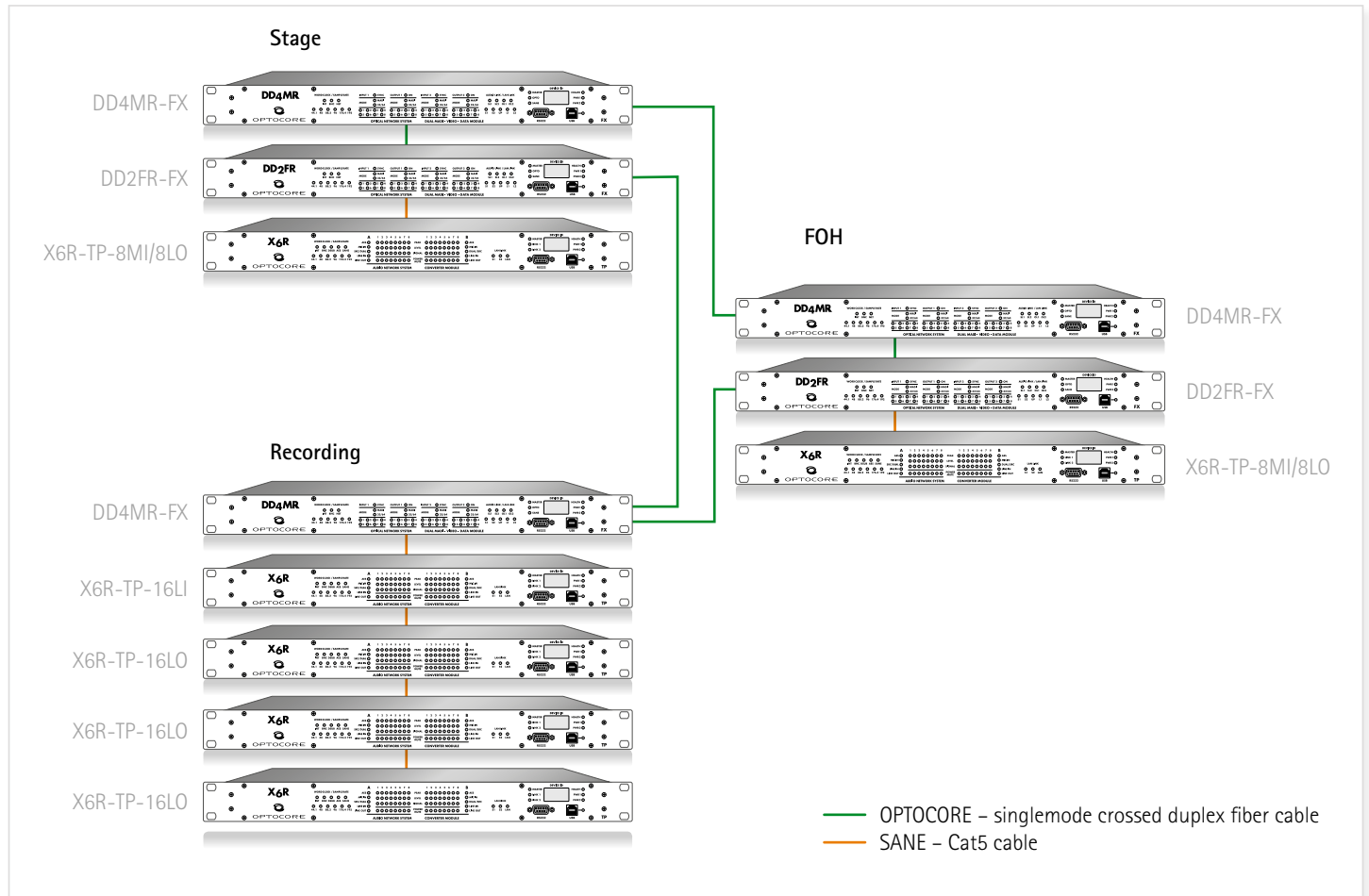
## CHALLENGES:

- Rental system to be used with different digital consoles

- 3 locations to be connected – Stage, Front of House and Recording truck

- Consoles are equipped with stageboxes provided by console manufacturer – connection between stagebox and console is MADI (Soundcraft, Studer, Lawo) or SNAKE (AVID)

- System should enable splitting signal directly from the stagebox or a mix from console to recording truck MADI, line and AES/EBU outputs

- DMX transport between FOH and stage

- LAN to control amplifiers on stage

## DETAILED SIGNAL REQUIREMENTS:

- Stage with 2 x Snake connection for redundant AVID integration; 2 x MADI for Soundcraft, Studer and Lawo; additional Mic In, Line Out and AES/EBU I/O

- FOH with connections similar to Stage

- Recording with 128 MADI channels for ProTools, 16 x Line In and 48 x Line Out and 8/8 AES/EBU to connect additional recording interfaces

## SOLUTION:

**Stage:**

- 1 x **DD4MR-FX** – with special firmware for AVID Snake protocol

- 1 x **DD2FR-FX** – allows connection of 2 stageboxes via MADI

- 1 x **X6R-TP-8MI/8LO** – adds 8 Mic Inputs, 8 Line Outputs and 32 AES channels (16 pairs)

**FOH:**

- 1 x **DD4MR-FX** – with special firmware for AVID Snake protocol

- 1 x **DD2FR-FX** – allows two MADI ports connection to the console

- 1 x **X6R-TP-8MI/8LO** – adds 8 Mic Inputs, 8 Line Outputs and 32 AES channels (16 pairs)

**Recording:**

- 1 x **DD4MR-FX** – with standard firmware to provide two MADI ports for ProTools recording

- 1 x **X6R-TP-16LI** – 16 Line Inputs for analog recording interface, with additional AES/EBU I/O

- 3 x **X6R-TP-16LO** – 48 Line Outputs which can feed external analog recording interface

## MAIN ADVANTAGES:

- One core system which supports multiple consoles – can be used with many different system designs

- Digital passive split with full channel selection flexibility

- Redundancy provided by Optocore ring topology – added redundancy for MADI point-to-point console-stagebox systems

- Scalability – system can be easily extended to provide delay lines or additional front end preamps

- RS485 transport – up to eight DMX universes between FOH and stage with digital DMX splitting

- LAN transport with redundancy to control amplifiers – Optocore works as virtual switch