Interfacing Märklin Digital with your PC

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Presentation Outline

- The basics
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- History of Märklin Digital & PC’s
- Review of Märklin Digital Components
- Hardware Requirements
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- Neat things to do & other stuff
The basics
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Why *Interface*?

- Contact tracks, relays, etc. are fine, but you can’t:
  - speed up / slow down engines
  - reverse engines
  - script sequences
- Provides an added dimension to enjoying your layout
- Do “neat” things: sound, video, etc.
History of Märklin Digital & PC’s

- 1985: Märklin Digital is born
  → 6001, 6015, 6020, 6035, 6038-9
  6040, 6043, 6050, 6080, 6083, 6088
- 1987: 6041 (Dig. Switchboard), 6084
- 1988: 6036 (Control 80f)
- 1989: 6023 (Central Control Unit)
- 1991: 6070 (Infrared Controller)
- 1992: 6073 (Turnout Decoder), 6090
- 1994: 6021 (Central Control), 6051 (Interface)
- 1996: 6017 Booster
Review of Märklin Digital Components

- 6020 Central Unit
- 6021 Central Control
- 6035 Control 80 & 6036 Control 80f
- 6040 Keyboard
- 6088 s88 decoder
- 6050 & 6051 Interface and cables
- c80 & c90 engine decoders
- k83 & k84 switch/accessory decoders
- 6073 & Naka decoders
Hardware Requirements

- **Train**
  - 6020 or 6021 Central Unit
  - 6050 or 6051 Interface & cable
  - Optional: 6035, 6036, 6040, 6088

- **PC**
  - CPU (286, 386, 486, Pentium)
  - Mouse
  - Extra serial port for Interface
  - Software
  - Optional: sound, video capture, etc.
Interfacing Considerations

- CPU speed
- Video (speed, resolution)
- Communications:
  - COM Ports
  - Interface Cable
- Software
- 6035, 6036, 6040, Infrared, etc.
Software

- Commercial / shareware
  - TPL
  - Digipet
  - Winlok

- Write your own
  - VB (Basic), Delphi (Pascal)
  - Communications, graphics, user interface
Support

- Märklin Digital Newsletter
- Books:
  - 308 Getting started with Märklin Digital
  - 850, 851, 852 Rutger Friberg digital experiments
- Internet sites:
  - http://www.marklin.com
  - http://www.marklin.de.com
  - http://members.aol.com/rjftrains
  - marklin@scintilla.utwente.nl
  - search engines, and many, many more
Neat things to do

- Turn on lights in a tunnel
- Turn on/off lights at a station
- Accelerate going up an incline
- Play a sound approaching a station
- Clean your tracks
- Capture video
Other stuff to do with your PC

- Layout design software
- Sound clips
- Video capture
- Electronic projects
- Remote operation
THE END