

# 4

## Electrics for Rolling Stock

### IntelliDesk

The smart driver desk concept  
for rail vehicles

Catalogue F400.en



More information here:  
[schaltbau-gmbh.com](http://schaltbau-gmbh.com)

**IntelliDesk – The future is here**

**Driver's desks for rail vehicles**

IntelliDesk is an innovative communications and wiring concept for system integration inside a driver's desk. Here, every subsystem can be simply connected to a field bus box and at once begin communicating with the on-board train control and monitoring system (TCMS) via a central master interface.

A unique feature is the predictive and condition-based maintenance. Thus, IntelliDesk has turned out to be a landmark on the path to standardization and modularization as intended by UIC 612, while simultaneously offering maximum flexibility and adaptability to a wide range of rail vehicles.

**Features**



**One-stop sourcing:**

Easy configuration of driver's desks, even completely assembled desks, including fully integrated electromechanical operating elements as well as all electronic subsystems. Fast and easy to plan; short implementation times.

**Clearly defined interfaces:**

Subsystems with integrated field bus and/or gateway for communication with the TCMS. Data communications via a central master interface.



**Custom, modular, robust, maintenance-free:**

The modular construction of our robust, shock and vibration-proof driver's desks enables alternatives in the design and layout of display and control elements. Status-dependent service display.

**Ergonomics for more safety:**

Ease of use, pleasant feel and modern design characterize Schaltbau driver desks. Improve wellbeing. Increase health. Promote concentration.



**Redundant Safety Architecture:**

Special consideration has been given to hardware and software safety design, ready for the next generation SIL 2 level driver's desk. Internal redundant CAN network compliant with EN 50159; Ethernet TCMS connection provided.

**Standard-compliant requirements:**

All devices and subsystems installed in IntelliDesk are UIC 612 compliant and fulfill the requirements of rail vehicle manufacturers and the relevant standards.



**Ergonomics & Design :: Smart Human Machine Interface**



Bespoke design  
Natural mapping of commands  
TOUCH buttons with HAPTIC & LIGHT feedback  
Smart key with user recognition  
Mobile device interfaces

User centered design  
Electronic timetable display (ETD)  
Mobile devices  
USB charger

Customized HMI  
Auto-test & data logging  
Predictive & condition based maintenance  
UIC 612 compliant  
SIL 2 ready

## Customized solutions

In cooperation with you, our experienced design engineers select appropriate solutions from the existing basic models and customize them to meet your needs.

Together, we find the optimum, state-of-the-art solution for every requirement. Our inhouse electronics development division enables us to respond quickly and flexibly to changing needs. Comprehensive type testing is performed in our laboratory according to customer specifications.

Generally, driver's desks are customized product developments because of the need for adaptations.

Modern project management ensures adherence to the required deadlines and quality – even when requirements change.

Talk to us and set us a challenge.

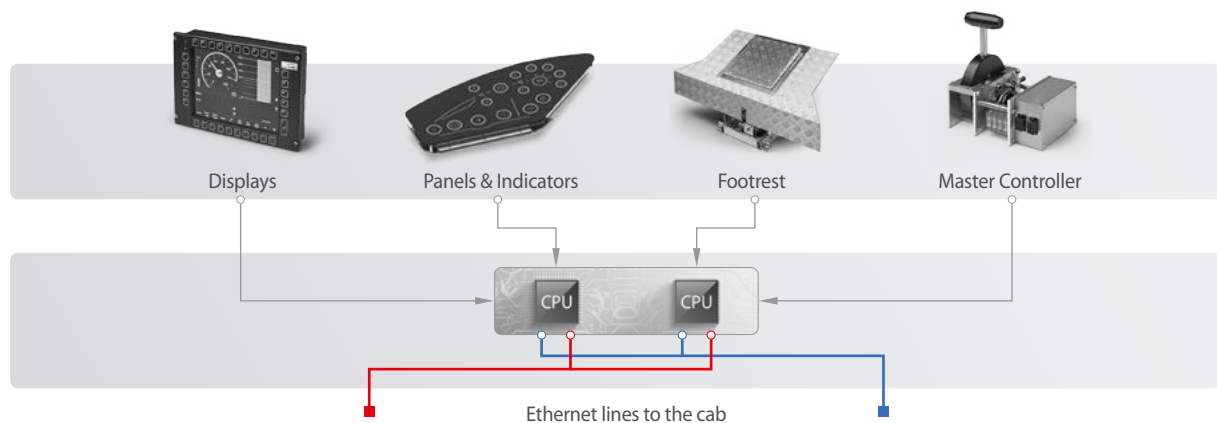
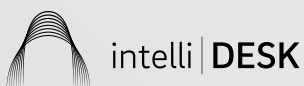
## The smart driver's desk concept

### Data communications via a central master interface

The innovative architecture enables optimal integration of all components and subsystems within the control panel, e.g. all displays, panels, levers and indicators. These components and subsystems are connected to a CPU unit in the driver's desk, which serves as the central master interface. This master interface is used for direct communication with the train control and monitoring system (TCMS).

### Predictive and condition-based maintenance

The communication of all components and subsystems with the CPU unit also increases cost-effectiveness during operation. Wear and failure can be promptly detected and downtime avoided thanks to reactive and preventive maintenance.


# Schaltbau GmbH

For detailed information on our products and services visit our website – or give us a call!

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with compliments:



Schaltbau GmbH manufactures in compliance with RoHS.



The production facilities of Schaltbau GmbH have been IRIS certified since 2008.



Certified to DIN EN ISO 14001 since 2002. For the most recent certificate visit our website.



Certified to DIN EN ISO 9001 since 1994. For the most recent certificate visit our website.

## Electrical Components and Systems for Railway Engineering and Industrial Applications

### Connectors

- Connectors manufactured to industry standards
- Connectors to suit the special requirements of communications engineering (MIL connectors)
- Charging connectors for battery-powered machines and systems
- Connectors for railway engineering, including UIC connectors
- Special connectors to suit customer requirements

### Snap-action switches

- Snap-action switches with positive opening operation
- Snap-action switches with self-cleaning contacts
- Enabling switches
- Special switches to suit customer requirements

### Contactors

- Single and multi-pole DC contactors
- High-voltage AC/DC contactors
- Contactors for battery powered vehicles and power supplies
- Contactors for railway applications
- Terminal bolts and fuse holders
- DC emergency disconnect switches
- Special contactors to suit customer requirements

### Electrics for rolling stock

- Equipment for driver's cab
- Equipment for passenger use
- High-voltage switchgear
- High-voltage heaters
- High-voltage roof equipment
- Equipment for electric brakes
- Design and engineering of train electrics to customer requirements

We reserve the right to make technical alterations without prior notice.

For updated product information visit [www.schaltbau-gmbh.com](http://www.schaltbau-gmbh.com).

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