

## Interlocking components

# PINTSCH BAMAG Control Panels

## Level crossing operation and control panels in interlockings

### Application

Beside push buttons and indicators level crossing control panels also contain counters, decommission switchers or loudspeakers for intercommunication systems. In general the control panels serve the dispatcher in the interlocking for the operation and supervision of level crossings of the supervision types main signal control, remote control, manual control or of 'on demand by call' barriers. If a control panel has to be integrated into an old interlocking techniques, such as NFA60 or SpM72, track layout squares or specific operating elements also can be integrated.

### Function

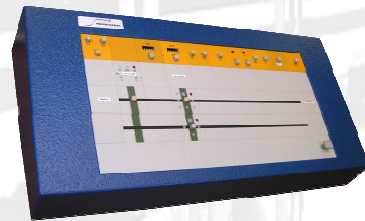
The dependence between signals and level crossings shall prevent endangering the street traffic and railroad traffic. After securing of a level crossing and fulfilment of the conditions on the side of the interlocking the main signal can be set manually or autonomous by the interlocking. The status of the level crossing is shown by different optical indicators (fault, disturbance, signal release etc.) in the control panel.

The operation is carried out by push buttons. All functions which are available only once per panel are ordered in the yellow group button area. Moreover, for each level crossing there are buttons related to the different tracks and others which are related to the level crossing itself. Safety relevant operations require a simultaneous pressing of a level crossing- (or track-) push button and a group button. Exceptions are e.g. the approach indication reset button and the button for interrupting the disturbance alarm clock. The control of a successful execution of an operation is possible by the optical indicators. The counters serve for operations which must be counted and registered, such as the track-related switching off by an auxiliary switch off button.

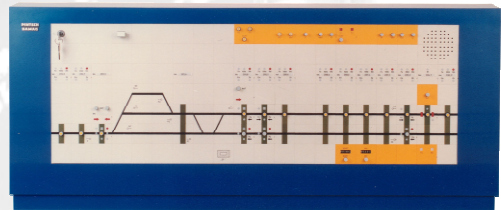
### Technical design

Control panels consist of a metal case and can be built with 5x5, 5x10, 5x15 squares or with special measures. The construction of the panel depends on the respective requirements which are provided by the track layout.

A wall terminal box WAK which forms the interface to the interlocking is part of every panel.



**control panel 5 x 10**



**control panel 5 x 15**



**Terminal box WAK**