

# Accessories

## Utility Software

Direct Commands	1
Monitor Flags	2
Macros	3
Teach Positioning Times	4
Random Positioning	5
Random Access Cycles	6
Random Fast Access	7
Quit	0

### Direct Commands

Direct entering of commands (ASCII-Characters) and sending to the Handling Controller. The commands can be entered as capital letters of Prompt entries by Return. Enter direct commands to KV-PLC, press q to quit Monitor Flags Status Flag of the Handling Controller. The status message "0" means inactive, the status "1" means active.

Code	Status Flag	Comment
P0	0000	0-initiator of carousel
Pn	0001	Position-initiator of carrousel
CtClse	0002	Gate closed switch
GtOpen	0003	Gate opened switch
KeySw	0004	Key switch
Gn LED	0005	Green LED
SW 2E0	0006	Manual positioning switch bit0
SW 2E1	0007	Manual positioning switch bit1
SW 2E2	0008	Manual positioning switch bit2
SW 2E3	0009	Manual positioning switch bit3
Acs.	1100	Carousel access (remote or manual)
Key Valid		Manual positioning switch valid
Ready	1915	Ready-Bit
Rot.Pos.	DM1	Actual carrousel position
Access.	DM0	Carrousel set position
AccV.	DM2	Access accepted

### Macros

Sending of complete, preprogrammed command sequences

Code	Comment
0	No access, carrousel rotation enable
1.9	Position carrousel
O	Gate open (only when carrousel is positioned)
C	Gate closed
R	Reset Handling Controller
Q	Exit macro menu
Accs.	Carrousel access (remote or manual)
Ready	Ready-Bit

### **Teach Positioning Times**

Program to measure positioning times of the carrousel. The program starts positioning automatically. As a result a table containing the measured positioning times is presented.

### **Random Positioning**

Program for positioning the carrousel randomly without gate movements. After entering the access intervals the program continuously simulates accesses at random positions until the "q-Key" is pressed. As a result a table containing statistical data is presented. If an error of positioning time larger then 0.4 seconds compared with the calibrated positioning time is observed a positioning error is assumed and monitored.

### **Random Access Cycles**

Program for positioning the carrousel randomly including gate movements. After entering the access intervals the program continuously simulates accesses at random positions until the "q-Key" is pressed. As a result a table containing statistical data is presented. If an error of positioning time larger then 0.4 seconds compared with the calibrated positioning time is observed a positioning error is assumed and monitored.

### **Random Fast Access**

Program for positioning the carrousel randomly including combined positioning-gate movements commands. After entering the access intervals the program continuously simulates accesses at random positions until the "q-Key" is pressed. As a result a table containing statistical data is presented. If an error of positioning time larger then 0.4 seconds compared with the calibrated positioning time is observed a positioning error is assumed and monitored.