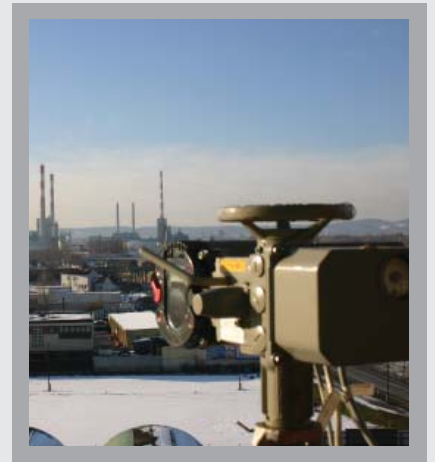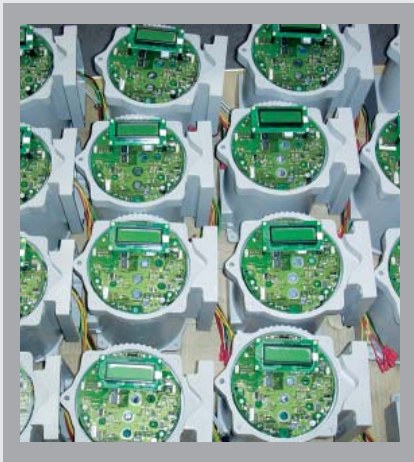# SCHIEBEL
actuators.schiebel.com

Your success is our actuator

SCHIEBEL Antriebstechnik GmbH
Josef-Benc-Gasse 4
1230 Wien
info@schiebel.com

Actuator-control unit
SMARTCON ®

Short instruction
Operation
Set-up of travel-end limits

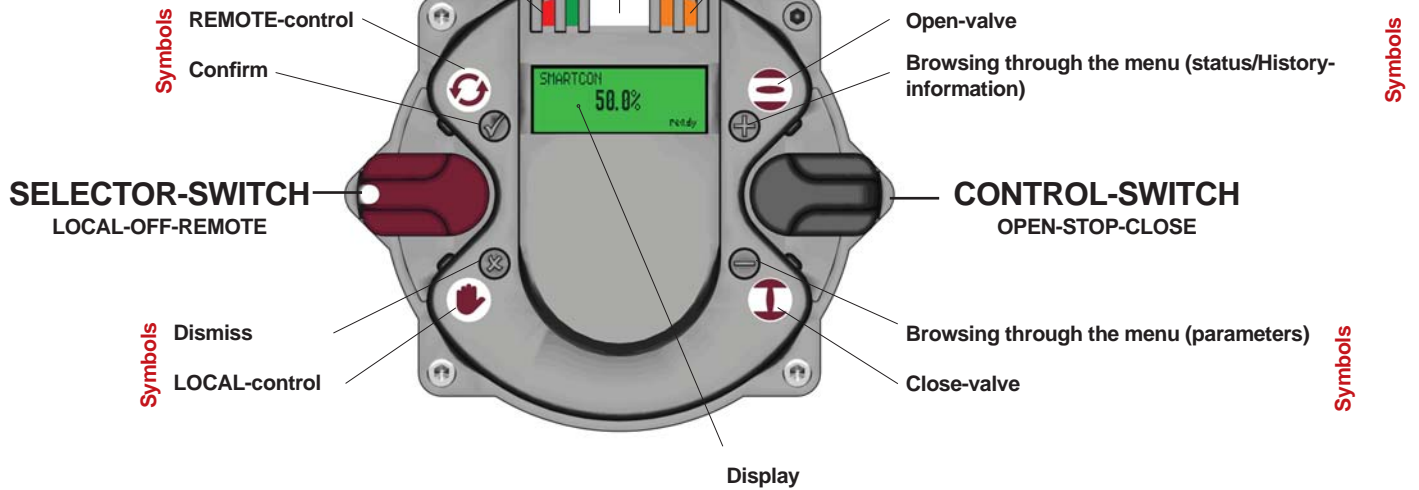# General overview/functions/handling of control unit SMARTCON ®

Valve position indication
LED glows: Valve is opened or closed
LED blinks: Valve is being opened or closed

Infrared-Interface

Status indication:
LED's glows: Actuator is ready
LED's blinking or not glowing: Failure (actuator is not ready)

Symbols

REMOTE-control

Confirm

Open-valve

Browsing through the menu (status/History-information)

Symbols

SMARTCON
50.0%
ready

SELECTOR-SWITCH
LOCAL-OFF-REMOTE

CONTROL-SWITCH
OPEN-STOP-CLOSE

Symbols

Dismiss

LOCAL-control

Browsing through the menu (parameters)

Close-valve

Symbols

Display

POSITION SELECTOR-SWITCH	DESCRIPTION	CONTROL-SWITCH FUNCTIONS
OFF Confirm Save ↑ Off ↓ Dismiss Main Display	The „OFF" position of the red Selector-switch serves the black Control-switch for browsing through the menus. The bigger the angle of the switch is the faster you can browse through the menu. + Browsing up: Status-Info S1 to S6 / History-information H1 to H20 - Browsing down: Parameters P1 to P20 The angle respectively the speed of the switches is being shown by a thin line at left and right border of the display. With the red switch you activate the edit-mode and you save or dismiss the adjustments. In the edit-mode you change values of parameters with the black switch.	Status-info History data ↑ Stop ↓ Parameters P1 to P20
LOCAL	If the red Selector-switch is engaged in "LOCAL" the black Control-switch serves as OPEN-STOP-CLOSE switch. + up: actuator opens the valve (left turning) - down: actuator close the valve (right turning)	Open ↑ Stop ↓ Close
REMOTE	If the red Selector-switch is engaged in "REMOTE" the control system operates the actuator. With the black Control-switch it is still possible to browse through the menu to view Status-information or parameter adjustments. Parameters can only be changed when the red Selector-switch is in „OFF" position.	Status-info History data ↑ Stop ↓ Parameters P1 to P20

Practice hints:
- Hold and operate the switches always with thumb , middle- and trigger finger.
- While browsing through the menu change the angle off the switch slowly and constantly until you reach the parameter, then let the switch rebound.
- The higher the angle of the switch is the faster you can browse through the menu.
- Pay attention to the lines with the speed indication on both sides of the display. To browse through the menu it is enough to have a short line (3 speeds)
- The most important parameters are at the beginning of the parameter menu.
- For the activation of the edit mode respectively to save changed parameters push the red switch up (2-3 barlines) and let it rebound. Wait for a moment (~1sec) if the value is saved (display changes from „Save?" to „Edit?" and vice versa.
- If you browsed too far in the menu , you can get very easy to the main display with a quick push on the black switch.
- In the „Stop" position oft he black switch and a short push on the red switch you get also to the main display.

Optical Indication of speed

P

Adjustment of the travel end positions for right closing valves

⚠️ **CAUTION – use this short instruction always in combination with main instruction manual!**
* This short instruction do not replace our main instruction!
* It is designed for skilled people who are acquaint with our main instruction in which safety instructions, mounting, handling and start-up are described.

* The main instruction must be always available!

It is assumed that the actuator has been correctly assembled and electrically connected

STEP 1
For the adjustment of the end positions the selector-switch and the control-switch have to be horizontal.
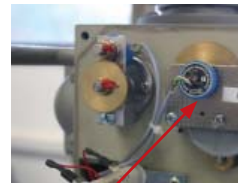
STEP 2 **
Push the hand leaver down and move the hand wheel while pushing. Close the valve with the hand wheel. After reaching the „CLOSE" position of the valve turn 0,5 to 1 revolution back to consider a possible over-run.

STEP 3
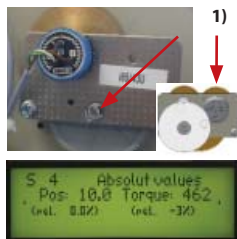Unscrew the cover of signal unit to get to the travel device.

Travel-device

STEP 4
Go up with the black control switch to the status menu S4.

STEP 5
Turn the slotted screw from travel device unit until „Pos"-value is at 10.0.
1) If you have a mech. position indicator turn at the messing wheel.

STEP 6
Go with the black control switch from menu S4 down to parameter „1.2 End limit CLOSE". You see on the display „EDIT?"

STEP 7
Confirm the question „EDIT?" with a short pan of the red selector switch to get into the Edit-Mode. You see on the display „SAVE?"

STEP 8
Push the red selector switch down until it locks. You see on the display „TEACHIN"(that means the „Pos" value which was setted manually will be automatically assumed)

STEP 9
Now let the red selector switch spring back in the „OFF" position.

STEP 10
Now pan the red selector switch up and let it rebound to save the changed parameter. You can see on the display that „SAVE?" changes to „EDIT?" The travel end position „CLOSE" is now adjusted.The LED for position „CLOSE" is glowing.

STEP 11 ***
Push the red selector switch down, lock it in „LOCAL" position. Move the black control switch up to open the valve. Before the valve is fully open let the black control switch rebound in „STOP" position. After that bring the red selector switch back in „OFF" position.

STEP 12 **
Both switches are in neutral horizontal position. Push the hand lever down while moving the hand wheel. Open the valve with the hand wheel. After valve is in „OPEN" position turn 0,5 to 1 revolution back to consider a possible over-run

STEP 13
Go with the black control switch down to parameter „1.1 End limit OPEN". You see on the display „EDIT?"

STEP 14
Confirm the question „EDIT?" with a short pan of the red selector switch to get into the Edit-Mode. You see on the display „SAVE?"

STEP 15
Push the red selector switch down until it locks. You see on the display „TEACHIN".

STEP 16
Now let the red selector switch rebound into the neutral position „OFF"

STEP 17
Now pan the red selector switch up and let it rebound to save the changed parameter. You can see on the display that „SAVE?" changes to „EDIT?" The travel end position „OPEN" is now adjusted.The LED for position „OPEN" is glowing.

STEP 18
Push the red selector switch short down the get back to the main display. Mount the cover of the signal unit and fasten the screws. ATTENTION: Pay attention that the sealing is mounted correct. OPEN and CLOSE the valve to make a test drive.

STEP 19: If the valve should be closed by torque the Parameter „P 1.4 End limit Switch off CLOSE" must be changed to value „1 – by torque" and saved.

** The hand lever de-clutchs automatically during electr. mode, so please DO NOT try to push the hand lever manually up!
*** Stop the drive early enough before reaching the limit position and pay attention to the over-run to avoid damages at the valve or the gearbox!
NOTE:
- During the adjustment of left hand closing valves proceed exactly as if the valve would be right closing. Turn the hand wheel right and adjust end limit CLOSE (though valve is opened). At the end edit Parameter „P 1.5 End limit Closing direction" to value „1" – inverse (ccw). The cross-bonding of all signals and commands happens automatically by the control unit.
- The LED indication of the valve positions CLOSE & OPEN can be changed in parameter „P 1.7" (standard: CLOSE=GREEN, OPEN=RED)