The AS-Interface® master unit has a standard serial interface for interfacing to the user's system. With the aid of the master, distances up to 15 m between the master and a host can be attained.

An RS232 interface can today be used by virtually every memory programmable controller and industrial PC. In many cases there are already tools for easily programming the interface, so that interfacing with AS-Interface® using the AS-Interface® master unit is easily accomplished.

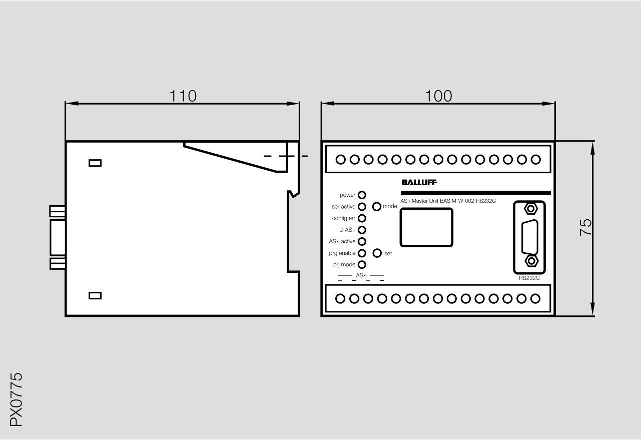
The entire voltage supply (master and AS-Interface® circuit) can also be provided on BAS M-W-001-RS232C by a simple 24 V DC power supply.

Integrated status LED's inform the user of the current operating conditions. In case of an error condition or during start-up, the user is assisted by a 2-digit, seven-segment display.

A simple interface software program (in C language) permits easy coupling to PC programs.

By using the two function keys and the 7-segment display, the AS-Interface® circuit can be easily started up and operated (programming of the slave addresses using 2 buttons).

Start-up, error finding and projecting on the AS-Interface® circuit can be done without serial communication, using only the buttons and the display.



		Master Unit use supply voltage in addition	**Master Unit** supplied from AS-Interface® circuit
Ordering code		BAS M-W-001-RS232C	BAS M-W-002-RS232C
Protocol		Balluff	Balluff
Outputs	RS232C	transmission rate 1200, 2400, 4800, 9600, 19200 or 38400 baud, automatic recognition	
	AS-Interface®	with internal supply voltage or additional AS-Interface® power supply	per AS-Interface® specification
Supply voltage U_B		24 V DC (18...30 V DC) always connect	from AS-Interface® circuit
Rated operational current I_e		≤ 150 mA	
Protected against polarity reversal		yes	
Short circuit protected		yes	
Ambient temperature range T_a		–25...+85 °C	
Function indication	LCD, 2-digit	address display/error code	
	LED green	voltage ON (power)	
	LED green	RS232C running (ser active)	
	LED red	configuration error (config err)	
	LED green	AS-Interface®-voltage OK (U AS-Interface®)	
	LED green	AS-Interface®-run normal (AS-Interface® active)	
	LED green	automatic programming (prg enable)	
	LED yellow	projecting mode active (prj mode)	
Degree of protection per IEC 60529		housing IP 40, terminals IP 20	
Buttons		2 (mode and set)	
Master profile		M 1	

The master control is a complete master and host in one unit. Sensor information can be directly linked with actuators.

The control program describing how to link process data is loaded through the serial port and stored non-volatile, so that even after power interruptions operation can be continued.

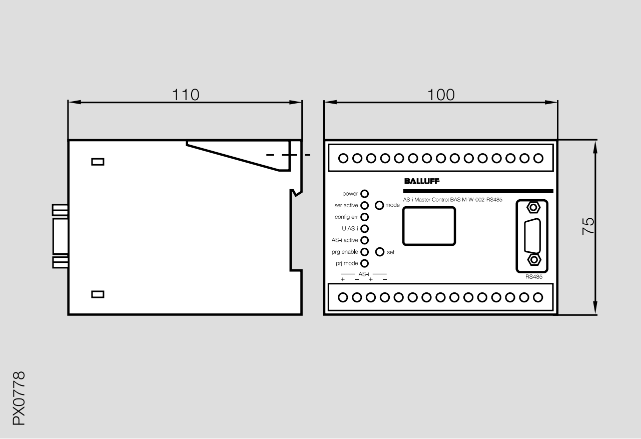
As long as no control program is being processed, the master behaves like a traditional serial master.

Programming the master control is based on "STEP 5" syntax (registered trademark of Siemens), but enhanced with AS-Interface®-specific components. Included software tools assist the user. Upload, download, timers, counters and flags can be used.

Up to 768 instructions, 128 bytes of flags, 15 times and 15 counters can be used. The timers and counters are 12 bits wide. The smallest timer increment is 10 ms.

The RS485 interface opens new application possibilities. The transmission distance becomes greater and multi-master operation is possible, i. e., up to 31 masters can be administered by a PC or host on a 485-interface.

The master can be accessed for information exchange at any time during the control or programming sequence from the host level through the serial interface.



		Master Control supplied from AS-Interface® circuit	**Master Control** supplied from AS-Interface® circuit
Ordering code		BAS M-W-002-RS485	BAS M-W-002-MOD485
Protocol		Balluff	MODBUS
Outputs	RS485	transmission rate 1200, 2400, 4800, 9600, 38400 or 57600 baud, automatic recognition	
	AS-Interface®	per AS-Interface® specification	
Supply voltage U_B		from the AS-Interface® circuit	
Rated operational current I_e		≤ 180 mA	
Protected against polarity reversal		yes	
Short circuit protected		yes	
Ambient temperature range T_a		0...+55 °C	
Function indication	LCD, 2-digit	address display/error code	
	LED green	voltage ON (power)	
	LED green	interface operating (ser active)	
	LED red	configuration error (config err)	
	LED green	AS-Interface®-voltage OK (U AS-Interface®)	
	LED green	AS-Interface®-run normal (AS-Interface® active)	
	LED green	automatic programming (prg enable)	
	LED yellow	projecting mode active (prj mode)	
Degree of protection per IEC 60529		housing IP 40, terminals IP 20	
Buttons		2 (mode and set)	
Master profile		M 1	

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