

CDB 109

CABLE - TV - Demodulator
ATV (AM) A/V

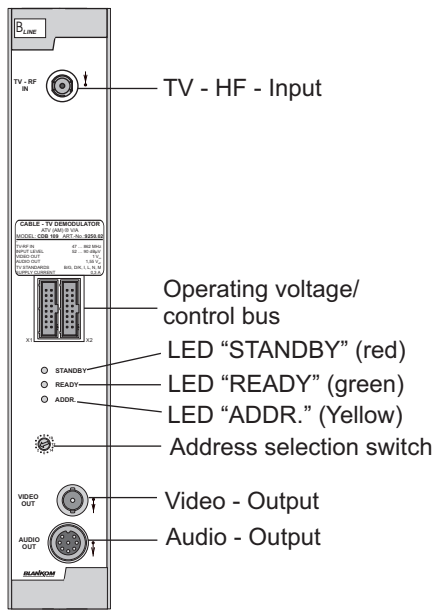


Fig. 01

Product variants

CDB 109 9250.02 VHF+UHF A/V

General

The cable - TV - demodulator CDB 109 is a module of the headend system B-LINE which is conceived for middle sized cable - TV networks. The module converts analogue TV - channels of the cable frequency range into A/V - signals.

All modules are being controlled, programmed and adjusted via the central control unit (HCB 100) and are working independantly afterwards.

The status of each module will be displayed with a colored LED:

Red	- STANDBY	Stand by modus
Green	- READY	Operating status
Yellow	- ADDR.	Remote control modus

Function description

The cable - TV - demodulator CDB 109 is equipped with a down - TV converter at the input which is tuneable within the complete cable - frequency range. The two-stage level control with delayed HF - level tray is optimized for high intermodulation stability of the front-end when multichannel allocation. Thereby the constance of the A/V - signal via a further input voltage level will be assured.

Notice: The cable - TV - demodulator is not designed for direct connection to the receiving antenna.

Additional functions: Remote supply of the pre-amplifier (Fig. 4)

PROGRAMMING

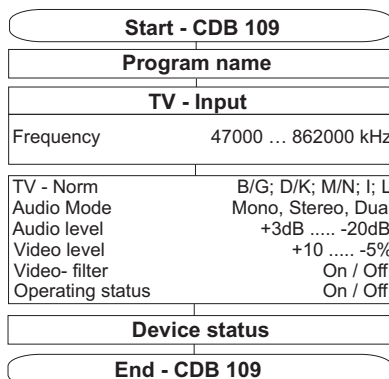


Fig. 02

Adjustment with the head end controller

Adjustment of the addresses at the bus extender BEB 100 and at the modules

Activation of the programming mode of each module by selecting the line (BEB 100) and the module position (01... 15) at the head end controller(HCB 100)

yellow LED will be lit up til the beginning of the parameter adjustment

Adjustment of the UCB 1x6 parameter(see fig.02)

green LED is lit up

After the programming the UCB 1x6 will be automatically switched into the operating status

yellow LED lights up briefly / green LED is lit up

Adjustment with the PC / Laptop

Condition for the remote programming is an "online - connection" after IP - standard and an ethernet connection at the PC / Laptop

Adjustment of the line / position addresses at the bus extender BEB 100 as well as at the modules

At the head end controller HCB 100 IP - address input (e.g. 192.168.001.001)

For "direct connection" between a PC and HCB 100 use a crossed patch cable (RJ 45)

For connection over a deviation use an uncrossed patch cable

HTML - browser start-up and put in IP - address as target address

If connected correctly the HTML - control surface at the PC will open up and a green LED (LINK) at the HCB 100 will be lit up

All adjustment of the modules are specified at the control surface

The manual instructions of the head end controller HCB 100 and the bus extender BEB 100 have to be considered!

TECHNICAL DATAS

TV - Input

Frequency range	47 ... 862 MHz
Tuning grid	31,25 kHz
AGC - level range	52 ... 90 dB μ V
Impedance	75
Nominal input level	68 dB μ V
Connector	F - socket
Noise figure	10 dB
TV/Norm	B/G; D/K; M/N; I; L
Preamplifier remote supply (Switchable)	12 V / 400 mA

Video - Output

Output voltage	1 V _{ss}
Impedance	75
Connector	BNC - socket

Audio -Output

Level (at 600)	6 dBm (= 1,55 V _{eff})
Output impedance	30
Connector	Socket / DIN 45326/ IEC 130 - 9 - 20

Physical information

Dimensions (l x w x h)	
without 19" - adapter	50 x 276 x 148 mm
with 19" - adapter	50 x 301 x 148 mm
Weight	1.200 g

Operating parameter

Voltage / Current	12 V (0,2 V) / 250 mA
Ripple of the supply voltage	10 mV _{ss}

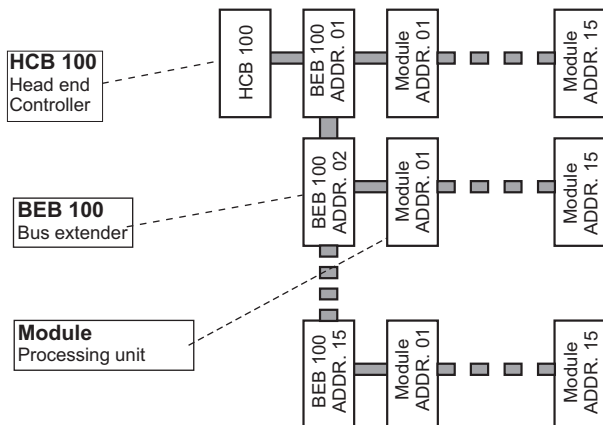
Environmental conditions

Temperature range	-10 ... +55 °C
Relative humidity	80 % (not condensing.)
Mounting method	vertical
Mounting location	squirting- and dripping water protected

Delivery contents

- 1 x BUS connector
- 1 x Audio cable ASK 525
- 1 x Video cable VVK 526

HEAD END BUS STRUCTURE

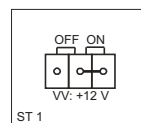


The number of the possible module connections (00 ... 15) to a BEB 100 depends on the total power consumption of this line!

Fig. 03

Additional functions

Remote supply of a pre-amplifier



Due to the remote supply of the pre-amplifier without an own voltage supply the 12 V - operating voltage of the converter can be switched over of the TV - RF - input socket.

To do so the plug in bridge at the plug in field "VV: +12 V" (ST 1) has to be plugged on to position "ON" after opening the device (left cover) at the tuner- circuit board.

Fig. 04

Allocation of the Audio -socket



Fig. 05

SECURITY AND OPERATING INSTRUCTIONS

STOP When assembling, starting-up and adjusting the modules, it is necessary to consider the system specific references in the manual instruction!

- ⚠ The modules may only be installed and started up by authorized technical personnel!
- ⚠ When assembling the modules into the receiving points, the adherence of the EMV regulations is to be secured!
- ⚠ The assembly and wiring have to be done without voltage!
- ⚠ All active modules may only be operated with the head end controller HCB 100 or bus extender BEB 100!
- ⚠ The main voltage for all power supply units is 230 V, 50 Hz.
- ⚠ With all work the defaults of the DIN EN 50083 have to be considered!
- ⚠ Especially the safety relevant execution of the DIN EN 50083/1 is necessary!

