

CLB 200 Base station

HF prints CLB reporter base station is just one of the models in a complete range of radio reporter systems. CLxx product range includes a stereo reporter transmitter, diversity receivers and a complete base station, equipped with a diversity receiver and a talkback transmitter with excellent audio characteristics. (No more headaches from noisy handheld radios)

CLB Base station is available in two versions, receiving with a maximum useful bandwidth of 10MHz or a useful bandwidth of 60MHz (174-195MHz & 202-235MHz). Because of the increasing use of DAB frequencies we need more flexibility in frequencies we can use for a stable reporter signal.

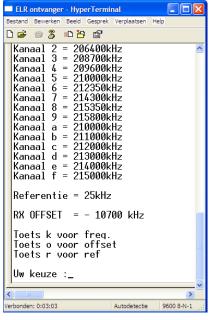
CLB reporter base station is very easy to use, all manual functions are located on the front panel including frequency readout on a bright LCD display. An optional remote control system is available, UHF receivers are available on request.

Drawing front basestation.



The back panel is **equipped** with 3 N female antenna connectors (BNC or TNC on request), 3 audio XLR-3 connectors (1 x Line in for UHF transmitter, 2 x Receiver line output), a sub D25 for remote control, AC inlet and optional XLR-4 male for 12V operation.

Frequency control for receiver and transmitter, we use a 16 channel switch on the front panel. All 16 frequencies can be reprogrammed through a standard RS232 protocol with Hyper terminal.



Because of the sublime sensitivity of the receiver in combination with a HIDYN audio compression, it is possible to keep a good steady signal over longer distances. Ericsson Broadcast noted that their reach was twice so far, compared with their own receiver.

In the picture an example of RS232 reprogramming with hyper terminal. All major setting can be changed, frequency but also its reference frequency. Hyper terminal is easy to use and can be found on most Microsoft Windows computers. If not, it is easy to find on Internet, and also available for Linux and Macintosh.

Specifications CLB 200 reporter base station

General:

Power supply 230V 40VA 12 - 15V 2,5A Antenna connectors N Optional BNC or TNC

Audio connectors XLR 3 male / female Housing 1 HE 19" depth 280mm

Transmitter

Channels 16 front switchable

Frequency range 410 - 470 MHz

Switching range> 15 MHzoptional: 60 MHzFrequency steps PLL12.5 - 25 or 100 kHzprogrammable

Channel switching BCD switch frequency & function on display

RF power led bar 10 led
Temperature led bar 10 led

Audio output led bar 10 led 30dB range

Range audio led bar -24..+ 6dBm

PTT front

HF + audio specifications

RF output power 5 Watt switchable from 0.5 - 1 Watt

Frequency deviation (standard) 3 kHz

Input level audio 6 dBm symmetric

De-emphases 750 us

Distortion 0.5 % typical

Signal to noise ratio transmitter > 40 dB (300 Hz – 3 kHz unweight)

Audio frequency range (standard) 200 Hz – 3 kHz +/- 1 dB

Receiver

Channels CLB 200 16 front switchable

Frequency range 180 - 220 MHz
Switching ranges 8 MHz (Dual 2x 8 MHz)
Frequency steps 25 - 100 kHz programmable

10.7 MHz

Antenna connector N Optional BNC or TNC

Audio connectors XLR-3 all audio outputs on back panel. Led bar 10 led 2x RF $1 \mu V - 1000 \mu V$ 10 led audio -24 / + 6 dBm

Mute signaling led internal adjustable, external optional

HF + audio specifications

Sensitivity 20dB Sinad < 1.0 μ V 0.8 μ V typ. (1x receiver)

1.2 μV typ. (2x receivers)

Harmonic suppression > 60 dB typ.
Blocking 50 MHz > 80 dB

IF Bandwidth mono 240 kHz optional semi broadband.

Output level audio 0 dBm a-symmetric non floating 6 dBm symmetric non floating

De-emphases 50 us

Distortion 0.3 % typical 0.7 % max

Audio 20 Hz – 15 kHz mono +/- 1 dB

Mono signal to noise ratio versus HF strength (Typical) HD=HIDYN

2 μV 40 dB 70 dB 10 μV 54 dB 90 dB 100 μV >60 dB 90 dB



CLB/CLR 200 Wideband Base station

HF prints CLB wideband reporter base station is the newest model in our complete range of radio reporter systems. Because of the increasing use of DAB frequencies we need more flexibility in frequencies we can use for a stable reporter signal, that's why we introduced this new model with 60Mhz useful bandwidth.

CLxx product range includes a stereo reporter transmitter, diversity receivers and a complete base station, equipped with a diversity receiver and a talkback transmitter with excellent audio characteristics. (No more headaches from noisy handheld radios)

CLB wideband reporter base station is very easy to use, all manual functions are located on the front panel including frequency readout on a bright LCD display. An optional remote control is available, UHF receivers are available on request. A combination of VHF & UHF receivers is available with our CLR model.

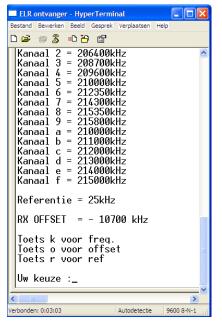
Drawing front panel base station



All major settings like frequency control, a choice between audio Line input or Microphone, PTT, high or low RF output power are all located on the front panel. Some of these controls can be overruled by our optional remote control.

The back panel is equipped with 3 N female antenna connectors (BNC or TNC on request), 3 audio XLR-3 connectors (1 x Line in for UHF transmitter, 2 x Receiver line output), a sub D25 for remote control, AC inlet and optional XLR-4 male for 12V operation.

Frequency control for receiver and transmitter, we use a 16 channel switch on the front panel. All 16 frequencies can be reprogrammed through a standard RS232 protocol with Hyper terminal.



Our new wideband receiver uses a double mid frequency circuit with sublime specifications. The specifications of this new receiver in combination with HIDYN audio compression, it is possible to keep a good steady signal over longer distances. Ericsson Broadcast noted that their reach was twice so far, compared with their own receiver.

In the picture an example of RS232 reprogramming with hyper terminal. All major setting can be changed, frequency but also its reference frequency. Hyper terminal is easy to use and can be found on most Microsoft Windows computers. If not, it is easy to find on Internet, and also available for Linux and Macintosh.

Models:

CLB 200 1x wideband VHF diversity receiver, 16 channels, 16 channel UHF talk back transmitter

All systems measure 1HE 19" 280mm depth.

Specifications CLB 200 WB reporter base station

General:

Power supply 230V 40VA 12 - 15V 2,5A Antenna connectors N optional BNC - TNC

Audio connectors XLR 3 male / female
Housing 1 HE 19" depth 280mm

Transmitter:

Channels 16 front switchable

Frequency range 410 - 470 MHz Optional:

174 - 230 or 556 - 606 MHz

Switching range > 15 MHz

Frequency steps PLL 12,5 kHz

Channel switching BCD switch frequency & function on display

RF power led bar 10 led

Temperature led bar 10 led

Audio output led bar 10 led 30dB range

Range audio led bar -24..+ 6dBm

PTT front

HF + audio specifications

RF output power 5 Watt switchable from 0.5 - 1 Watt

Frequency deviation (standard) 3 kHz

Input level audio 6 dBm symmetric

De-emphases 750 us

Distortion 0.5 % typical

Signal to noise ratio transmitter > 40 dB (300 Hz – 3 kHz unweight)

Audio frequency range (standard) 200 Hz – 3 kHz +/- 1 dB

Receiver

Channels CLB 200WB 16 front switchable

Frequency range VHF 174 - 230 MHz UHF 556 - 606 MHz

Switching ranges > 50 MHz

Frequency steps 25 – 100 kHz programmable. IF 25 – 100 kHz 2nd IF 10,7 MHz

IF band width180 kHz(250 kHz steps possible)Antenna connectorN 2xoptional BNC or TNC

Audio connectors XLR

Led bar 10 led 2x RF 1 uV - 1000 uV

10 led audio -24 / + 6dBm

Mute signaling led internal adjustable, external optional

HF + audio specifications

Sensitivity 20dB Sinad < 1,0 uV typical < 0,7 uV

Harmonic suppression > 70 dB typ.
Blocking 50 MHz > 80 dB

IM 3^{th} order > 76 dB typical > 80 dB Input IP3 > 6 dBm typical > 10 dBm

Output level audio 0 dBm a-symmetric non floating

De-emphases 6 dBm symmetric non floating 50 us

Distortion 0,5 % typical 0,7 % max

Audio 20 Hz – 15 kHz mono +/- 1 dB

Mono signal to noise ratio versus HF strength (Typical) HD=HIDYN HF signal 2 uV 40 dB 70 dB 10 uV 54 dB 90 dB

10 uV 54 dB 90 dB 100uV >60 dB 90 dB

Dimensions 484 x 280 x 44mm

Options free of charge:

12V DC inlet (XLR 4)
Remote control Sub D25
Extra audio output (2nd XLR)
Adjustable Mute on front (receiver)
RS 232 connection for reprogramming (jack 3,5mm)

HIDYN

HIDYN compression is compatible with HFTechniek, Sennheiser. Optional Hecom (+ € 50,00)

For use of this transmitter equipment, a license from the telecom authorities in your country is required. Check in your country were this office is located and make a request for this license. Also when you want to use the equipment abroad, you will have to request a license in the country were you are going to use the transmitter. Without this license, the use of the transmitter is not allowed in the EU.

If you want to use the talkback transmitter in a big event with multiple transmitter users, always check what frequencies can be used to prevent interference with other users.

This equipment complies to current ETSI regulations. Additional regulations, for example IATA (flying objects) have to be requested by the user at the local authorities.