



# Macrotel X1/X2 Multimode

## Multimode Telephone Hybrid

### >> Manage Your Calls with Any Technology Combination

Macrotel X1 Multimode and Macrotel X2 Multimode can manage one or two POTS (Plain Old Telephone Service) landline, VoIP, Bluetooth or GSM (with optional interface) telephone connections. Audio enhancement features are custom designed to guarantee the best quality in phone calls, the internal framework based on DSP (Digital Signal Processor) works in real time taking care of the telephone signal process delivering the best possible audio performance. Macrotel X1/X2 Multimode it's a Telephone Audio Processor able to shape the sound to optimize the yield of every single phone call.



# /// Overview

Macrotel X1/X2 Multimode manages calls from POTS (Plain Old Telephone Service), VoIP, Bluetooth or GSM (optional) telephone connections and it embeds a web server and a simple and intuitive GUI accessible from any device and browser. For services synchronisation and logs Macrotel X1/X2 Multimode connects to a NTP server. The main XLR input and output connectors can manage analogue or AES/EBU signals according to the device settings (AES/EBU input/output is optional) while a second XLR analogue output is also available. When in Bluetooth mode the two outputs act like a stereo balanced output.

Macrotel X1/X2 Multimode records telephone calls on a USB flash memory plugged in the USB front panel slot. Audio will be recorded in PCM format with a self-explaining filename based on date/time and can include the RX audio only or both RX and TX signals. It is also possible to send an RTP-PCM audio stream to an external PC to record the call, in this case the recording will include the RX audio only or both RX and TX signals.

Customers using any digital console of the Oxygen series can control Macrotel X1/X2 Multimode through the network, just adding its IP address. In this way there is no need to use a GPIO but you should only connect the Macrotel X1/X2 Multimode to the Oxygen Console through the Telco module.

A multiple GPIO port allows to manage the device from external equipment, like audio console or PC. System sends "Ring", "Hold", "Hook" and "REC" status and manages "Hook", "Rec", "Mode" and "Hold" functions. On the front panel an audio meters with 18 LEDs shows the RX and TX audio level of each channel. Additional LEDs show working Mode and Power on. Power supply can be used between 90 and 260 V AC - 47-63 Hz: this allows to use it worldwide.

- Multi-line digital telephone hybrid POTS/GSM/VOIP
- Automatic gain control (AGC);
- Digital echo canceller;
- Hold caller/attenuator;
- Expander and compressor;
- Audio limiter;
- Digital AGC processor with 3 bands fully parametric EQ;
- Analog and AES/EBU digital inputs and outputs (optional);
- 1 line and 2 lines models;
- POTS/PSTN;
- GSM Quad Band (optional);
- Integrated web server for remote control;
- Separate send and receive;
- LAN and USB ports;
- Auto-answer and disconnection;
- Balanced XLR I/O;
- Remote control software and dialer;
- Echo cancellation through a digital process on DSP (POTS);
- Advanced audio processing functions: AGC, parametric EQ, audio filters, compressor, expander and limiter;
- Internal Web Server allows device configuration;
- Automatic setup;
- 1 selectable XLR input: Analogue or AES/EBU (AES/EBU is optional);
- 1 selectable XLR output: Analogue or AES/EBU (AES/EBU is optional);
- 1 balanced XLR analogue output;
- Phone call recording in PCM format on USB support (RX only or RX+TX);
- Front panel led meters displaying RX/TX levels;
- Audio stream generation in RTP/PCM format (RX only or RX+TX);
- Front panel LED: Gain RX, Gain TX, Mode;
- "Hook" and "Hold line" lighted buttons;
- 4 GPI interfaces, 4 GPO interfaces;
- Integrated Caller Identifier (CID) – only for VOIP;
- Input and output call logs;
- G711-G722 VOIP audio codecs;
- Local telephone output (POTS).



Macrotel X1 front



Macrotel X1 rear



Macrotel X2 front



Macrotel X2 rear



Web Interface Control Panel



For more information  
about Macrotel X1/X2  
Multimode, visit our website

