

# BLUE BOX 15KHz PORTABLE PSTN / GSM AUDIO CODEC

## SPECIFICATIONS

<b>AUDIO</b>	
Audio inputs	1x Mic/Line switchable, balanced 10kΩ XLR-F 1x Aux/Tape, unbalanced - 3.5mm mini-jack
Audio outputs	1x Line level low-Z balanced XLR-M 1x Headphone, unbalanced 1/4-inch stereo-jack
GSM / Data Connection	D-9F - provides RS-232 serial "audio" data - also allows codec software upload (PC management program supplied as part of software update)
Hands-Free Cellphone Connection	3.5mm mini-jack socket for Hand-free kit provides telephone quality audio via GSM
Telephone Line & Ext Phone Level controls	RJ11C 6-pin modular jacks Audio Input, Output and Local/Return Balance
Nominal levels	Mic -85 to -40 dBu, Line -10 to +10 dBu Line out +12 dBu max, Headphones 0.5W
<b>Blue Box CODEC</b>	
PSTN	15KHz compatible with Comrex Matrix and Vector and Hotline compatible (10KHz) on a single, standard telephone line. "Hybrid" operation bypasses codec on very poor lines.
GSM	15kHz 2-way audio depending on GSM mobile service available. Requires Null modem connector and GSM data connection
Nominal Coding Delay	100mS approx for both PSTN & GSM. Please note, there may also be a telephone network delay
Coding Algorithm	20Hz to 15KHz @ 24000 KB/S & above;
Upper Freq vs Connect Rate	to 12KHz @ 21600; 11KHz @ 19200;
Voice Mode	7KHz at 14400; 6KHz @ 12000; 5KHz @ 9600 20Hz to 7KHz in Voice Mode plus 300 baud data
<b>OPERATION</b>	
Setup and Status	Via Backlit LCD ; User and Hidden Menu-driven
Dialling/call control	Built-in Keypad, external phone or Quick-dial
Quick Dial numbers (44-digit)	Last Number redial (00) plus 19 stored numbers
Indicators	Codec ready; ring/carrier detect; input audio peak
GPI Contact Closures	Codec Ready and Alarm on 3.5 mini jack sockets
Modem	20 preset country codes plus external dial
<b>PHYSICAL</b>	
Size	240 x 165 x 70mm (WxDxH) (9.5" x 6.5" x 2.75")
Weight	0.7kg (1.5lbs)
Power	External 15V supply - mini-DIN connector
Optional battery kit (BATT-BB)	External NiMH battery and holder giving 7 hours' operation & backup in case of mains failure
PSTN interface	RJ11 (cable provided)
GSM interface	D-9F data port - Null Modem adapter available
Feature / Software Updates	Uploadable to Blue Box via external data port

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SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE  
ALL TRADEMARKS ARE RECOGNISED



## COMREX BLUE BOX 15KHz PSTN / GSM DIGITAL AUDIO CODEC



▼ Blue Box

▼ Connections for external DC PSU, GSM data, Telephone line, Ext Telephone and GPI contacts (Ready and Alarm)



▼ Connections for switchable Mic/Line in, Ext In, hands-free, Line out and headphone out

## DESCRIPTION

First there was the Hotline, then the Vector followed by the Matrix and now - the Blue Box. The Comrex Blue Box is an entry-level POTS (Plain Old Telephone System) / GSM audio codec for sending high quality 2-way remote contributions to the studio. PSTN and GSM are both supported, offering up to 15kHz full duplex audio on a single telephone line or using a suitable high speed data GSM phone & service. There is a switchable mic / line XLR input plus a socket for an external audio source - typically connected to a mini-disk recorder or similar - and there are both headphone and XLR line outputs with input and output level control. The Blue Box is fully compatible with industry-standard Matrix and Vector codecs offering up to 15KHz stable 2-way audio even on average phone connections, and with the HotLine where the algorithm provides up to 10KHz. The Blue Box works on any GSM network but the studio codec must be a Matrix or another Blue Box which are equipped for GSM operation, and the GSM phone must be able to access a high speed data service to achieve the best results. A Built-In Hybrid allows Plain Old Telephone mode when poor lines or the GSM service won't support a modem connection. The Blue Box comes with universal-input mains power supply, telephone connect cable, operations manual and black canvas carry case and an optional NiMH Battery Pack provides up to 7 hours continuous operation plus mains backup.