

BASICS four wire

Radio Relay and Order Wire Over IP

vocality
international

BASICS Range



Introduction

Vocality's multi-function routers and multiplexers are used in their thousands in satellite networks worldwide. Vocality has, one by one, taken the core functionalities from these devices and extracted them to produce significantly lower cost, standalone units so operators with a single requirement need can address it with the BASICS unit that suits them.

'BASICS four wire' is based on the 'BASICS voice' concept, offering 2 or 4 voice channels, but presenting them as 4 wire audio interfaces, with isolated transmit and receive audio. E&M signalling is also supported on all four channels, with the IP WAN port connecting over the satellite back to another BASICS four wire device at the hub site - for long line audio extension.

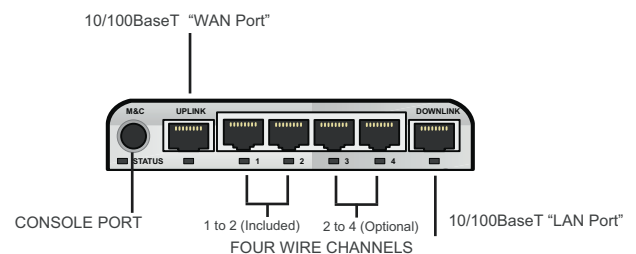
The BASICS FOUR WIRE provides a very small form factor easily integrated unit ideally suitable for Tactical Radio Extension Over IP or Broadcaster Order Wire for Satellite News Gathering Trucks and Flyaways. As a standalone device it can be used as a simple Four Wire SIP ATA.

MAJOR FEATURES

- Rugged OEM Option
- Small Form Factor
- Low Power
- SIP Media Gateway Compatible
- Cisco MAR Compatible
- Twisted Pair WAVE Compatible
- Silence Suppression
- Voice Activation Keying detection

APPLICATIONS INCLUDE

- Military/Tactical Radio Relay Extension
- Order Wire For Broadcasters
- One or Two Way Audio For SNG
- Remote Industrial Sensors
- Oil Pipeline Monitoring



spec sheet

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BASICS four wire

SPECIFICATION



OEM READY
FOR QUICK AND
EASY INTEGRATION

As well as a boxed version, BASICS is also available as an OEM standalone board, with wraparound aluminium heat-jacket, designed for embedding within satellite modems, integrated size-reduced kits, man-packs— they will fit almost anywhere, with deployment firmly in mind. All Vocality BASICS devices are designed to cascade together, ensuring a simple method of adding multiple devices together in expanding sites. The 'BASICS four wire' device, for example, can be cascaded into a 3 unit stack, delivering 12four wire channels which appear as one stack of units.

MECHANICAL:

STANDALONE ENCLOSURE 68554/BOX

Form Factor:	Standalone enclosure
Cooling:	Conduction by internal Heat Jacket to case
Operating Conditions:	0-70degC 0-95%RH non-condensing
Shock and Vibration:	TBD
MTBF:	TBD
Dimensions:	123 x 136.5 x 26.5mm
Indicators:	4 blue voice channel status LEDs, 2 blue Ethernet port status LEDs, 1 bicolour red/green status LED, White case LEDs
Max. Weight:	250g

Electrical:

Line Input Rating:	5V DC@3A
Consumption(typ):	10W

Connectors:

DC Power:	4-way locking Power Connector
M&C:	6-way Locking Mini-DIN
Ethernet:	2 x 8-way RJ45
Analogue Voice:	4 x 8-way RJ45

OEM VERSIONS 68554

Form Factor:	PC104plus card with Heat Jacket
Cooling:	Conduction by Heat Jacket to host
Operating Conditions:	0-70degC 0-95%RH non-condensing
Shock and Vibration:	TBD
MTBF:	TBD
Dimensions:	95.89 x 90.17 x 15.1mm
Indicators:	LED Drivers available. Refer to Manual.
Max. Weight:	150g

Electrical:

Line Input Rating:	5V DC@3A
Consumption(typ):	10W

Connectors:

DC Power:	Screw-down terminals
M&C:	Via 10-way AMP System-50 RA connector for LEDs/console
Ethernet:	UTP on 10-way AMP System-50 RA connector
Analogue Voice:	4 pairs on single 10-way AMP System-50 RA connector

FUNCTIONAL (Common to all Form Factors):

M&C Port:

Electrical Interface:	V.24/RS232 serial
Format:	Async 9600bps (115200bps during software upload), 8, N, 1
Protocol:	Formatted terminal emulation or TTY mode

10/100base-T Ethernet Ports:

Number of Ports:	2
Presentation:	Auto-MDIX
Formats:	IEEE 802.3i(10base-T), IEEE 802.3u(100base-TX)
Protocol Support:	DNS Client, DHCP Client, Telnet
Functionality:	Vocality IP Aggregate, IP passthrough, SIP voice gateway
Bridge/Router capability:	IP passthrough

Analogue Voice/FAX Ports:

Number of channels:	2 standard expandable to 4 by Feature Key
Interfaces:	4-wire Tie-line with Type V E&M keying activation and loop output
Compression:	G.723.1 (5.3/6.3Kbps MP-MLQ), G.729 Annex A (8Kbps CS-ACELP), G.726 (16-40Kbps ADPCM), G.727 (16-40Kbps E-ADPCM), G.711 (64Kbps PCM) μ -law or A-law
Relays:	DTMF
Max 'M'lead activation range:	+0.8 to -48V
Maximum 'E'lead voltage:	+/- 100V relative to chassis
Maximum 'E'lead current:	+/- 100mA
Signalling:	MFR1, R1, R2, SS4, SS5, Call Progress
Echo cancellation:	G.168 adaptive (16/32ms tail)
Coding delay:	Per algorithm
Gain:	\pm 31dB programmable in 1 dB

SOFTWARE OPTIONS

The following software options may be enabled by installing a Feature Key.

(1) SWF/4V	Activate all four voice ports
(2) SWF/SNMP	SNMP management option (SNMP v2c & v3 traps)

"BASICS FOUR WIRE is a product under continuous development.

Information given in these pages is for general information only and is subject to change."