

digital installation
mixers

Why waste time and effort wiring up separate units in an install when you can get a compact rackmount unit that lets you set up the mixer, gates, compressors, EQs and limiters on a PC, leaving the finished system tamperproof and sounding perfect? The **DR128** and **DR66** are really simple to set up, they can be controlled in many different ways (wall plates, touchscreens, timed events, front panel keys etc) and unlike some alternatives, they're well within budget for everyday installations. Check out our WinDR system manager software (available free from www.allen-heath.com/dr128.asp) to see exactly how the **DRs** are set up.



NEW PL-I remote wall plate (see page 43) →

FEATURES:

Digital Signal Processing

- Digital Signal Processing Engines (**PEs**) give power & versatility. 2 **PEs** are standard - 1st **PE** is fixed configuration and implements the matrix processor, **input & output faders**, **signal meters**, **crosspoint matrix** with variable gain at each point, **output protection limiters**, multiple priority **ducker**, **automatic mic mixer** and 'soft' **insert** points for signal processing. 2nd **PE** allows signal processing assignment by installer for the application. 'Resource racks' of DSP can be loaded with assignable **parametric EQs**, **graphic EQs**, **noise gates** and **compressors**. Optional **DSPx** expander cards providing 2 **PE's** may be added

Delay Option

- **DSPd** delay option card provides up to **680ms** of signal delay on each output channel

WinDR Software

- 32-bit Windows™ application running on PC such as laptop, desktop, or networked system. Provided with the **DR66** or **DR128** for the installer to configure the internal routing and signal processing according to the requirements of the installation. Using 3 main windows: 1) **Offline DR Unit Simulation** window - provides front panel controls and display together with controls and indicators for remote functions. 2) **Input and output channel windows** - show controls for each channel including faders, mute, polarity, naming and x-point levels. 3) **Resource toolbar** - shows available DSP in resource racks and allows click and drag assignment to channels. Updated software can be downloaded free from our website

Patches

- Each **DR** unit can store up to **99** patches depending on the resources involved. **Full patches** [affecting all parameters] or **partial patches** [affecting selected parameters] can be edited using the PC then named and saved to the **DR**. Sets of programmed patches together with channel names, scheduled event details and processor rack details can be saved as 'configuration files' to disk to archive the settings

LCD Display

- Displays active patch number, name, day, time and other information. A real time clock is included for **scheduled patch events**

Setup Keys

- Front panel keys **SETUP**, **<ESC** and **SET** work with UP & DOWN keys to navigate and select the menu parameters available. Later OS versions leave only LCD contrast, day and time options available to prevent operator tampering

SysNet

- **ALLEN&HEATH** communication protocol used to control the **DR** from external third party industry standard remote controllers e.g. **AMX™** or **Crestron™** or 'Intelliplate' from audace. Version 2 of the **DR** operating system allows control of patch recall, input and output levels and mutes, plus crosspoint levels via the **RS232** port. **DR-switch** adapter card option uses the SysNet port

DR Gateway

- **ALLEN&HEATH** software utility for Windows™ allows **DR** unit to be controlled via an IP Network. Lets the installer access the unit remotely using the WinDR system manager application via a computer network, through an Ethernet port or dial-up connection. Run on a host computer via **RS232** plus its Ethernet port to network access. More than one **DR** can be connected to multiple serial ports on the host

BS5839

- Compatible with **BS5839** installation requirements for Alarm systems, plus **IEC65**, **EN60065**, **UL6500** and **CSAE65/94** safety standards

External PSU Backup

- Rear connectors provide input from a single **24V** external battery

DR 66 & 128

Technical Specifications 0 dBu = 0.775 Volts rms

Internal Headroom

DR66	+12dB
DR128	+15dB

Maximum Output Level

+16dBu	into 600 ohms
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Frequency Response

20Hz to 20kHz	+/-1dB
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Distortion

THD better than	0.004% @ 1kHz
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Crosstalk

Interchannel	> -80dB at 1kHz
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Noise 22Hz - 22kHz

Mic Ein	-128dB (150 ohms source)
Line preamp at	0dB gain -90dBu
Mix noise (all routed)	-80dBu

Panel Meters 2 colour

Red:	Peak -6dB dBFS
Green:	Signal -42dB dBFS

Phantom Power

DR66	+18V, internal jumper links
DR128	+15V, internal jumper links

Power Requirements Mains voltage set for local requirements

DR66	50/60Hz 25W max
DR128	50/60Hz 70W max

Power Supply

Internal regulated hybrid Switch Mode/Linear

Power Consumption

DR66	25VA Max
DR128	70VA Max

AC power requirements

Factory wired for	100, 120, 220, 230V AC,
50/60Hz mains input	
Fuse	T315mA (220V - 240V AC) T630mA (100 - 120V AC)

DC Power Backup External DC Power Supply Input

Nominal +24V DC (+/- 15%)	
DR66	Fuse 2A (internal) 1 Amp max
DR128	Fuse 5A (internal) 3.5 Amps max

Mechanical specifications - Dimensions in mm

	DR66	DR128	Width	Height	Depth
Desktop	486	486	19"	44 (1.7")	350 (14")
			88	3.5"	350
			Sizes do not include feet		
Weight	DR66	DR128	Unpacked		Packed
			6.5kg (14.3lb)		7kg (15.4lb)
			9.5kg (20.9lb)		10kg (22lb)

ADC

DR66	20-bit Fs x 64
DR128	24-bit Fs x 128 S-D

DAC

DR66	20-bit Fs x 128
DR128	20-bit Fs x 128 S-D

Processing

2 x Motorola 56002	24-bit fixed point
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Sampling Frequency

48kHz

DR128

COMPARISON

DR66

8 Balanced XLR . Recessed rear panel gain trimmers . Internal jumper links configure attenuator pad and +48V	Mic/line Inputs	2 Balanced XLR . Internal gain trimmers . Internal jumper links configure attenuator pad and +15V
4 Line level, dual RCA inputs sum to mono. Internal gain trimmers	Line Inputs	4 Line level, dual RCA inputs sum to mono. Internal gain trimmers
8 Balanced XLR . 50 ohms outputs with internal level trimmers	Outputs	6 Balanced XLR . 50 ohms outputs with internal level trimmers
12 front panel keys can be configured as momentary press up/down volume controls or mutes for the channels or crosspoint matrix, partial or full patch recalls , or patch select using scroll keys. Stereo link provided so one switch can affect two adjacent channels. Front panel leds can be assigned as signal meters , mute or status indicators	Front Panel Keys	8 front panel keys can be configured as momentary press up/down volume controls or mutes for the channels or crosspoint matrix, partial or full patch recalls , or patch selects using scroll keys. Stereo link provided so one switch can affect two adjacent channels. Front panel leds can be assigned as signal meters , mute or status indicators
Up to 2 DSPx expander cards, each providing 2 PEs, can be added to the unit, giving a maximum of 5 PEs for custom-configured DSP	Expander Cards	1 DSPx expander card, providing 2 PEs can be added to the unit giving a maximum of 3 PEs for custom-configured DSP
DR-switch allows expandable opto-isolated I-O capability via a DR-link adaptor card	Remote Outputs	25-pin D connector provides 4 opto-isolated outputs and remote switch inputs, plus battery backup connections. DR-switch allows expanded I-O capability via a DR-link adaptor card
Facilities for 8 programmable remote switches to control the DR parameters	Remote Switches	Facilities for 12 programmable remote switches to control the DR parameters
2 U	Rack Mounting	1 U



Connections 0dBu = 0.775 Volts RMS, 0dBV = 1 Volt RMS, 0dBV = 0dBfs

INPUTS

Model	Mic In	Line In
DR128	x8 XLR, Balanced Pin2+, 3- Pad selected	x4 Dual RCA, Unbalanced Phono A&B mono-summed
DR66	x2 XLR, balanced Pin2+, 3- Pad selected	x4 Dual RCA, unbalanced Phono A&B mono-summed

OUTPUT

Model	Mic/line Inputs	Line Outputs
DR128	x8 XLR, Balanced Pin2+, 3-	50 ohm Variable -10dBV to +4dBu (internal)
DR66	x6 XLR, balanced pin2+, 3-	50 ohm Link Selectable -8dBu to +4dBu
Both	x1 9 way D Female	57.6kbaud
DR128	x8 9 way D Female	Opto-isolated to 2.5KV
DR66	x1 25 way D Female	Opto-isolated to 2.5KV
	Switch Inputs X12	Opto-isolated to 2.5KV
	Switch Outputs X4	@10mA Opto-isolated to 2.5KV