

Introduction

Certain functions of the DR66 can be remotely controlled using a simple protocol over an RS232 serial link. This lets you use it with third party controllers such as touch screen displays and wall panels.

The SysNet option is a kit of parts which is fitted to the DR66 to provide an additional serial port running the required version of SysNet protocol. The remote controller needs to be programmed to communicate with the DR66 using this protocol. A copy of the protocol specification can be downloaded from the Allen & Heath web site.

Two versions of SysNet operating system are available, one for Version 1 DR operating software, the other for Version 2. Both are supported with this kit. It is important that the correct version and protocol are used. This affects the parts fitted to the option card. Refer to the notes below on version compatibility.

Installation is a straightforward process requiring removal of the top cover, fitting the internal option card and plugging on the cable harness supplied. Please read these fitting instructions carefully before starting and heed the precautions noted for trouble free installation and use.

Important Notes on Version Compatibility

If your DR66 is running **DR Version 2.1n** (n = any number) or greater then the SysNet **V4** firmware and **V6.1** protocol must be used. For example, this applies to WinDR V2.11. A SysNet card may not be required as the standard DR66 RS232 port can be used to interface with the controller. However, if you are already using the RS232 port to connect to your PC and wish to have simultaneous SysNet control then you should fit the option card to provide the additional port. A SysNet card fitted with the V4 PIC (programmable integrated circuit) is required. The card is fitted with this PIC when shipped.

If your DR66 is running **DR Version 1.nn** then the SysNet **V2** firmware and **V5** protocol must be used. For example, this applies to WinDR V1.83. The fitted V4 PIC should be replaced with the V2 version packed separately in the kit.

The latest V5 and V6.1 SysNet protocol documents and version information can be downloaded from the Allen & Heath web site: <http://www.allen-heath.com>. This information is required when programming the remote controller.

Controllable Functions

V5 Protocol WinDR V1.xx :

- Input and Output Channel Levels
- Crosspoint Matrix Levels
- Patch Recalls

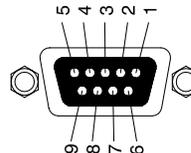
V6.1 Protocol WinDR >V2.1x :

- Input and Output Channel Levels
- Crosspoint Matrix Levels
- Patch Recalls
- Input and Output Mutes

The Interface Port

The SysNet card provides a standard RS232 style 9pin female D-type connector. The V6.1 protocol runs at 19200 baud. The V5 protocol runs at a slower 9600 baud. The physical interface uses three wires RX, TX and ground. No handshake lines are required.

Pin 2	SysNet TX
Pin 3	SysNet RX
Pin 5	Ground



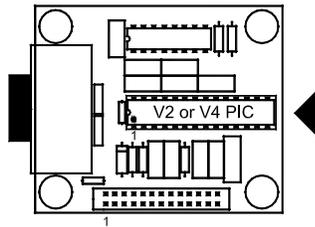
Handling Precautions

The SysNet card contains sensitive integrated circuits which can be damaged by static discharge from human body contact. The card is packed in an anti-static conductive bag to protect it during shipment. To avoid damaging the static sensitive components on the card make sure you discharge any static electricity from your body and any tools you use. One way to do this is to touch the grounded bare metal of the DR128 chassis. To reduce the risk wear a grounded wrist strap. Handle the card by its edges only. If you need to replace the PIC (firmware) make sure you do not touch its pins.

Fitting Procedure

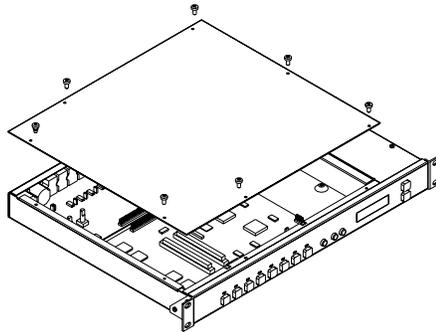
Step 1

Check which version of PIC you need. The V4 part is fitted as standard. If you need to run the earlier V2 version then carefully unplug the 28-pin integrated circuit and replace it with the V2 version supplied. Make sure its pin 1 is positioned as shown and the pins are correctly aligned and pressed in.



Step 2

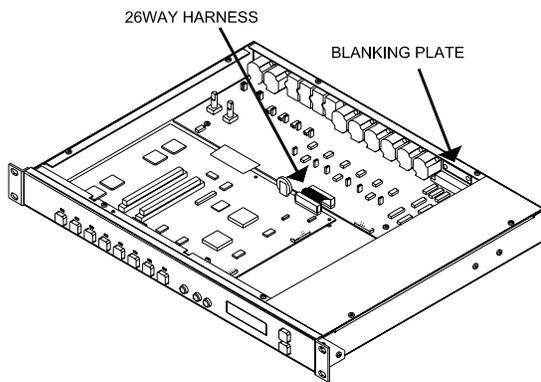
Turn off power to the DR66 and unplug the mains cable. Remove the 7 fixing screws as shown and lift off the top cover. Do not remove the power unit safety cover.



Step 3

Remove the rear panel SysNet option slot blanking plate by unscrewing the two fixing screws.

Locate and carefully unplug the 26way harness that connects between the CPU and Connector circuits.

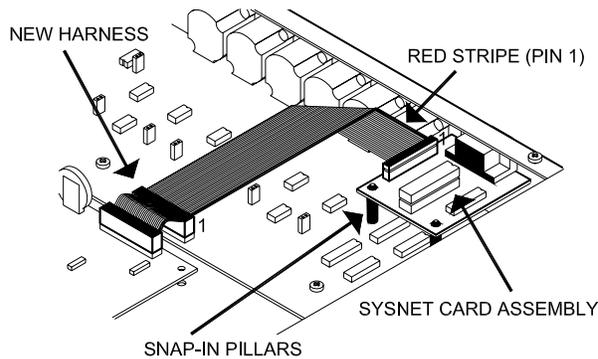


Step 4

Fit the snap-in mounting pillars to the track side of the SysNet card and mount the assembly into the DR66 rear panel using the two fixings attached to the D-type connector.

Fold and position the new 26way harness as shown plugging it into the CPU, Connector and SysNet cards. Note the position of the pin 1 red stripe.

Make sure the harness pins are correctly aligned with the mating connector pins. Push the plugs fully home.



Step 5

Check your work and refit the top cover. Power up the DR66 and check that it boots up correctly.

Refer to the relevant SysNet Protocol document for details on programming the remote controller. For instructions on programming and operating the remote controller refer to the supplier of that equipment.

For the latest information on the DR Series visit the Allen & Heath web site. For further technical support or comment on using this equipment please contact or email support@allen-heath.com.