Operators Manual

DN3603

KLARK TEKNIK GROUP
Klark Teknik Building,
Walter Nash Road, Kidderminster,
Worcestershire DY11 7HJ
England

Tel: (01562)741515 Fax: (01562)745371

DECLARATION OF CONFORMITY

The Directive Covered by this Conformity

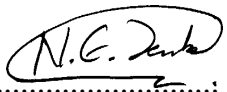
89/336/EEC Electromagnetic Compatibility Directive, amended by 92/31/EEC & 93/68/EEC.
73/23/EEC Low Voltage Directive, amended by 93/68/EEC.

The Products Covered by this Declaration

Equipment Type	**Product Name**	**Variants**
Graphic Equaliser	DN300	DN360, DN301, DN332
Preset Equaliser	DN320	DN330
Parametric Equaliser	DN405	DN410
Dynamics Processor	DN500	DN504, DN510, DN514
Audio Analyser	DN6000	
Crossover	DN800	
Delay Line	DN7204	DN7103
Programmable Equaliser	DN3600	DN3601
Remote Control System	DN3698	DN3603
Crossover	DN8000	
Programmable Equaliser	DN4000	

The Basis on which Conformity is being Declared

The Products named above and hence the Variants thereof listed above comply with the requirements of the above EU directives by meeting the following standards:
EN 50081-1 (EN55022 class B)
EN 50082-1 (IEC801 Part 2, 4 / ENV 50140 / ENV 50141
EN 60065.

Signed:  .....: N. G. Tembe
Authority: Head of Engineering, EVI Audio (U.K.) Plc
Date: 1st January 1997

Attention!
The attention of the specifier, purchaser, installer or user is drawn to the special limitations to use which must be observed when these products are taken into service to maintain compliance with the above directives. Details of these special measures and limitations to use are available on request, and are also contained in product manuals.

Attention!

Cables:
This product should only be used with high quality, screened twisted pair audio cables, terminated with metal bodied 3-pin XLR connectors. The cable should be connected to pin 1. Any other cable type or configuration for the audio signals may result in degraded performance due to electromagnetic interference.

Electric Fields:
Should this product be used in an electromagnetic field that is amplitude modulated by an audio frequency signal (20Hz to 20KHz), the signal to noise ratio may be degraded. Degradation of up to 60dB at a frequency corresponding to the modulation signal may be experienced under extreme conditions (3V/m, 90% modulation).

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Introduction

The DN3603 Remote Docking Station is designed to expand on the capabilities of the Hand-Held Remote Control by offering the possibility of single wire operation, or wireless operation on two completely independant channels.

For added security, the docking station also has the ability to store all the current settings of all the units connected in it's own battery backed RAM. These settings can also be dumped (and restored) to a suitably equipped midi storage device.

Connecting the Docking Station.

Operation of the docking station is straightforward - connect the hand-held remote unit to the docking station via the 5-pin XLR lead supplied.

The chain of DN3600s/DN3601s is then connected to the midi in/out sockets on the back of the docking station, in to out through the chain, with the last unit completing the closed loop.

Correct Power-up Confirmation.

Correct power up of the docking station is confirmed by both switch LEDs flashing one very short, then one longer pulse. After this, the remote has access to the chain of units.

Built-in Functions of the Docking Station.

The docking station has several functions it can perform in the absence of a remote. It has the ability to store the current configuration of all the connected units (up to a total of 49) in its own battery backed memory, and to recall these settings to a chain of units when required. These features give the user an added level of security above and beyond that available by removing the remote, and allow other chains of units to be loaded with the current configurations from a different chain of units.

Invocation of these functions is as follows...

System Store:

Press the switch marked “F2” while turning the docking station on. This will cause it to scan the chain of units to find out how many are connected. It will report this number by flashing the green LED the appropriate number of times.
NOTE: During this scan/report period, no storage is occurring, so the user still has the chance to escape by pressing the “F1” button and preserve the currently stored configurations.
After this, the units will each be interrogated for their current configuration and the settings stored. When the sequence is finished, both switch LEDs will flash and normal operation will resume.

System Recall:

Recall of the docking stations stored configurations is performed in a similar manner. Press “F1” as the docking station is turned on and a scan/report period will begin.
NOTE: During this scan/report period, no recall is occurring, so the user still has the chance to escape by pressing the “F2” button and preserve the currently stored configurations.
This is followed by each unit being accessed and loaded with a new configuration. The recall sequence will end with both switch LEDs flashing once as above and normal operation resuming.

NOTE: During both of these operations the remote will not operate. Any EQ changes will NOT be performed, and trying to access either a different mix or a memory will result in the remote automatically locking itself until the end of the store/ restore.

The docking station now supports system exclusive dumps to and from suitably equipped storage devices, be they computers running sequencing software, or stand alone midi data filers such as the Yamaha MDF-2.

Invocation of the sysex dump features is as follows:

As the docking station is powered up, pressing BOTH “F1” and “F2” will enter the unit into sysex mode - this is confirmed by the switch leds beginning to flash alternately. At this point sysex dumps can be both transmitted and received. These two functions are invoked as follows.

Transmit dump FROM docking station TO storage device.
Press the “F2” key once more (for safety it has to be held for one second or more). Confirmation of sysex transmit is shown by the green LED illuminating for the duration of the dump (about 2 seconds) , and then normal operation of the unit resuming (both LEDs flash once). the dump is always 3729 bytes long.

Receive dump FROM storage device.
Press the “F1” key once more (for safety it has to be held for one second or more). Confirmation of sysex receive is shown by the red LED illuminating. The docking station is now waiting for a sysex dump. Sending the correct size dump from the storage device will cause the LED to go out when all 3729 bytes have been received. Normal operation will then resume as above.

NOTE: It is important that the storage device does not transmit any midi clock messages before or during a dump to the docking station as they will corrupt the data to be stored. All major sequencer packages will allow the transmission of the system clock to be disabled. The docking station does, however, protect itself against corrupted data, checking it for the correct format before overwriting its memory. Corrupted data dumps will be ignored, and are made apparent by both LEDs flashing quickly ten times after the dump has finished.

Once the docking station has powered up successfully, the red LED associated with the "F1" key will illuminate, signifying that the docking station is receiving on the "red" channel. This channel can be changed to the "green" channel by pressing the "F2" key, causing the red LED to extinguish and the green one to illuminate.

To prevent unauthorised changing of the channel, it is possible to lock the docking station on one channel. This is accomplished by pressing both the "F1" and "F2" keys together. Confirmation of this action is given as five flashes of the channel LED that the system is now locked to. Pressing both keys together again will unlock the system - this is also confirmed by five flashes of the channel LED. The lock can also be removed by turning the docking station off then on again. It will always default to the "red" channel, to correspond to the default channel on the remote.

If two docking stations are powered up with radio links connected, and they are within range of each other, to prevent them both receiving on the same channel, they will attempt to change each others channel for a moment in a bid to operate on alternate channels. The docking station which is powered up last will end up on the "red" channel. A random delay based on fader settings is introduced on power up to give both docking stations a better chance of ending up on alternate channels.

Note that this software is compatible with remote radio software version 2.0 which did not have dual channel capability. If the docking station receives a message with no channel information present, it will decode this message regardless of which channel it is set to. Both LED's will extinguish to confirm this. The system can be locked to this "third" channel - when "F1" and "F2" are pressed together, both LED's flash to confirm the lock/unlock operation. If the system is not locked, a "real" channel ("red" or "green") can still be selected as before.