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700/800 Digital Multi Channel
RF Signal Booster

Product
Manual

Deko4078SD

MW-DCSB-40D95-700/800-24-AC-R

Rev. 1.3

ABOUT THIS MANUAL

This Product Manual describes the Deko4078SD Digital Multi Channel Selective 700/800 MHz signal booster and provides information on the setup, configuration and troubleshooting procedures.

TO WHOM IT IS INTENDED

This Product Manual is intended for experienced technicians and engineers. It is assumed that the customers installing, operating, and maintaining Deko4078SD signal boosters are familiar with the basic functionality of signal boosters.

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SAFETY WARNINGS

Throughout this manual, important safety warnings are included to warn of possible hazards to persons or equipment. A safety warning identifies a possible hazard and then describes what may happen if the hazard is not avoided. The safety warnings – in the form of Dangers, Warnings and Cautions must be followed at all times. These warnings are flagged by the use of a warning icon, usually the triangular alert icon seen below. The exclamation point within the triangular alert icon is intended to warn the operator or service personnel of operation and maintenance from factors related to the product and its operating environment, which could pose a safety hazard.

GENERAL SAFETY WARNINGS CONCERNING USE OF THIS SYSTEM

Always observe standard safety precautions during installation, operation and maintenance of this product. Only a qualified and authorized personnel should carry out adjustment, maintenance or repairs to the components of this equipment.

 DANGER: ELECTRICAL SHOCK

This equipment is intended to be installed indoor. Wet conditions increase the potential for receiving an electric shock when installing or using electrically powered equipment. To prevent electrical shock when installing or modifying the system power wiring, disconnect the wiring at the power source before working with un-insulated wires or terminals.

 CAUTION: RF EXPOSURE

To satisfy FCC RF exposure requirements for mobile transmitting devices, a separation distance of 100 cm or more should be maintained between the antenna of this device and persons during device operation.
To ensure compliance, operations at closer than this distance is not recommended. The antenna used for this transmitter must not be co-located in conjunction with any other antenna or transmitter.

 WARNING: RESTRICTED ACCESS LOCATION

Access to the Dekolink 700/800 DMSB signal booster installation location is restricted to SERVICE PERSONNEL and to USERS who have been instructed on the restrictions and the required precautions to be taken.

 ATTENTION: SYSTEM TESTING

All system tests should be performed with FM signals.

Glossary

The following is a list of abbreviations and terms used throughout this document.

Abbreviation/Term	Definition
AGC	Automatic Gain Control
DMSB	Digital Multi Channel Signal Booster
DDF	Dekolink Digital Filter
DL	Downlink - The path covered from the Base Transceiver Station (BTS) to the subscribers/service area via the 700/800 DMSB UHF
DSP	Digital Signal Processing
ESD	Electro-Static Discharge
FPGA	Field Programmable Gate Array
IF	Intermediate Frequency
PLL	Phased Locked Loop
RF	Radio Frequency
MT	700/800 DMSB signal booster Management Tool
UL	Uplink - The path covered from the subscribers/service area to the Base Transceiver Station (BTS) via the 700/800 DMSB UHF
VSWR	Voltage Standing Wave Ratio

REVISION HISTORY

The revision history for this document is shown in Table 1-1.

Table 1-1: Revision history

P/N	Revision	Date	Description
300SC30031	1.0	14-July-2008	Initial Version
300SC30031	1.2	11-AUG-08	Modifying model numbers

CONTENTS

1   INTRODUCTION

Deko4078SD Digital Multi-Channel Signal Booster provides cost effective indoor and outdoor communications coverage for the complete 700/800MHz Public Safety spectrum assigned to the wireless networks.

Deko4078SD meets public safety infrastructure design requirements that include higher base station site elevation, higher power output per channel, transmission only on traffic channels that are in use and single receiver omni-directional site.

The system supports advanced Digital Signal Processing (DSP) technology, programmable digital filters - where each filter supports up to 24 channels, and programmable bandwidth of up to 12 MHz. These capabilities enable the user to quickly and simply customize the Booster according to changing site requirements.

A SmartALC power control algorithm automatically optimizes the gain setting by learning the actual range of RSSI levels over a user-specified period of time. The SmartALC algorithm prevents oscillations, reduces the amount of isolation required by the system and optimizes the system to minimize noise rise at the donor cell site.

An intuitive GUI based Management Tool (RMT) provided with the Booster is used to configure, monitor and manage the Booster through an Ethernet connection to the system.

Figure 1. Deko4078SD

1.1   FEATURES

- 95 dB RF gain
- Composite Output Power:
  - Downlink: + 40 dBm
  - Uplink: + 27 dBm
- Up to 24 channels per system with software defined channel frequency
- Software defined filter bank supporting up to 100 filters
- Filter bandwidth selection of 12.5KHz to 4.5 MHz

- AGC per channels/band
- Dry-contact alarms
- High linear amplification
- High spectral purity
- Highly accurate frequency selection
- Excellent out-of-band interference prevention
- Mechanism for tunable rejection of interference from adjacent cellular and paging frequencies
- SmartALC™ technology:
  - Automatically sets optimum gain
  - Prevents oscillations and balances coverage
- Intuitive GUI control and management interface

1.2   MODELS

The following table lists the Deko4078SD Booster models provided by Dekolink. The range of operating frequencies varies according to the network type and model, as specified below.

Table 2. Models and Frequencies

Model	Description
MW-DCSB-40D90-700/800-24-AC-R	Digital Multi Channel Selective Signal Booster 700/800 24 channels, 40dBm composite 90 dB gain, AC powering including rack
MW-DCSB-40D90-700/800-12-AC-R	Digital Multi Channel Selective Signal Booster 700/800 12 channels,40dBm composite,90 dB gain, AC powering including rack

1.3   ARCHITECTURE

Deko4078SD comprises the following main units:

- PAU (Power Amplifier Unit) – provides interface to the (Donor and Service) antennas and provides isolation between the uplink and downlink signals.

  In the downlink - performs the preliminary filtering to (700 or 800) bands.

  In the uplink – amplifies the signal.
- Main unit – performs the digital filtering and provides management and control functions
- Power Supply – supplies power to the Main unit

The following figure shows the operation flow in the downlink path and the uplink path.
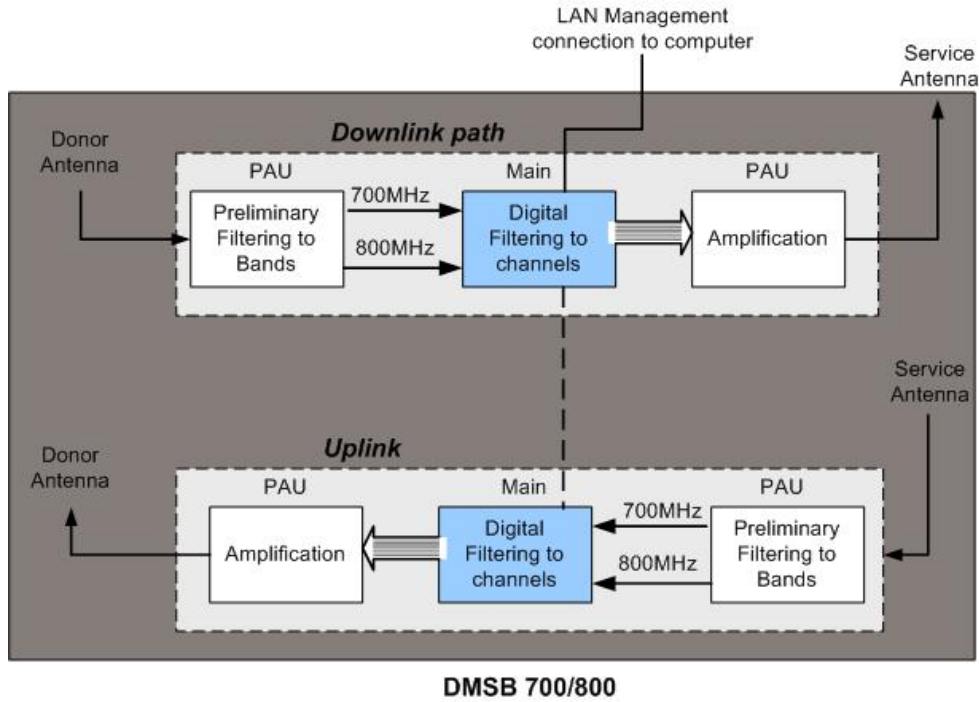
1.4   DEKO4078SD ELEMENTS

The elements are installed in a 19 inch cabinet and are supplied with the necessary connections except for the RF antenna connections, power (AC outlet) and dry contact alarm connections (the dry-contact alarm cable is supplied with the accessories).

The LEDd of the system elements are all in the front, and the ports and connectors are accessed from the rear.

The following figure shows an example of a typical Deko4078SD cabinet configuration.
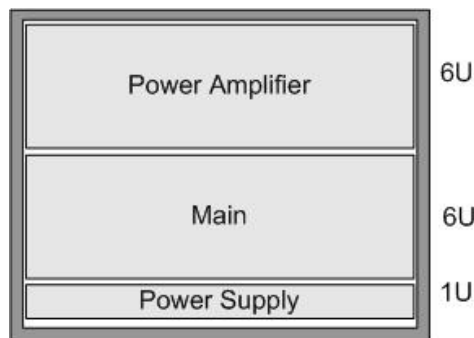
Figure 2. Typical Deko4078SD Cabinet Configuration

1.4.1   MAIN UNIT

1.4.1.1   Front Panel Interfaces

The front panel includes the LED indicators and Ethernet port (for service personnel).

Figure 3. Main Unit Front Panel

The following table provides a brief description the front panel indicators.

Table 3. Main Unit Front Panel Indicators

Status Indicator	Description
Power On	Main drawer power supply: GREEN - Power On GRAY – Power Off
Status	Main drawer status: GREEN – All statuses are OK (no alarms) ORANGE – Minor malfunction RED – Major malfunction
System	Service status: GREEN - System ready for normal operation (if this LED is not green the system will not operate). RED – No service. Major malfunction at Main or Power Amplifier drawer *Note: If the **System** LED is red but the **Status** LED is not then this indicates a problem at the Power Amplifier unit.*

1.4.1.2   Rear Panel Interfaces

The rear panel contains the RF connections, power connections and dry-contact alarms.

Figure 4. 700/800 DMSB UHF Rear Panel

The following table provides a description of the rear panel ports.

Indicator (alarm)	Description
Alarms	Dry-contact alarm connections (if necessary)
DC Power 28V	28 V DC; 12A
RS485	For Dekolink service personnel
Controls	For Dekolink service personnel
DL 800 Pre Output	SMA Male Connector – connection to PAU **DL800 Pre Input** connector
DL 700 Pre Output	SMA Male Connector – connection to PAU **DL700 Pre Input** connector
UL 700-800 LNA Input	SMA Male Connector - connection to PAU **UL 700/800 LNA Output** connector
DL 700 LNA Input	SMA Male Connector – connection to PAU **DL700 Pre LNA Output** connector
UL 700/800 Pre Output	SMA Male Connector – connection to PAU **UL700/800 Pre Input** connector
DL 800 LNA Input	SMA Male Connector – connection to PAU **DL 800 LNA Output** connector
Modem	Future option
Debug 1	N/A - For Dekolink Service Personnel
Debug 2	N/A - For Dekolink Service Personnel

1.4.2   POWER AMPLIFIER UNIT

1.4.2.1   *Front Panel Interfaces*

The front panel includes the power amplifiers' status LEDs.

Status LEDs
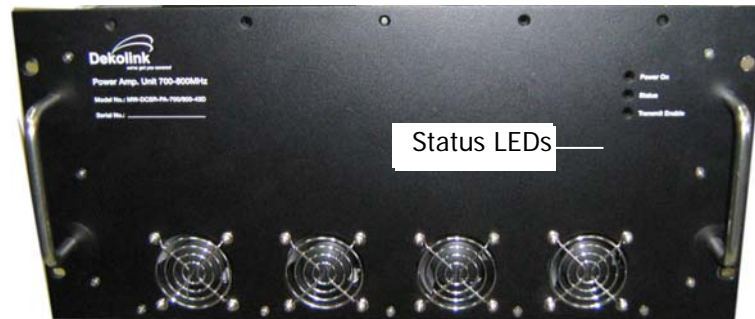
The following table provides a description of the status indicators.

Status Indicator	Description
Power On	Power supply of P.Amp drawer: GREEN - Power On GRAY – Power Off
Status	Status of P.Amp drawer: GREEN - OK ORANGE – Minor malfunction RED – Major malfunction
Transmit Enable	GREEN - System is operable and transmitting a signal GRAY – No transmission (at all domains – 700 DL; 800DL; UL)

1.4.2.2   Rear Panel Interfaces

The power amplifier rear panel includes the interfaces to the Main unit and to the Donor/Base and Service/Mobile antennas.
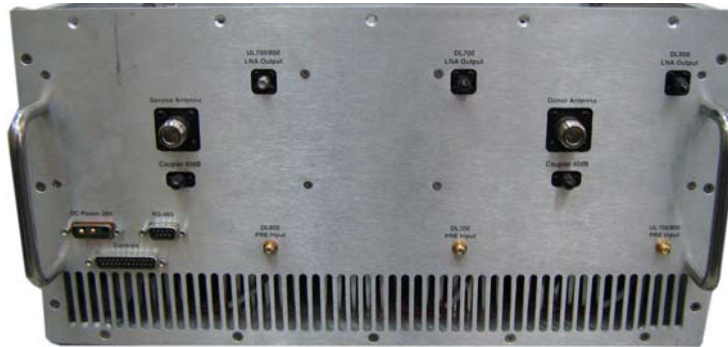
Figure 5. Power Amplifier Rear Panel

The following table provides a description of the rear panel ports.

Indicator (alarm)	Description
DC Power 28V	28 V DC; 12A
RS485	For Dekolink service personnel
Controls	For Dekolink service personnel
Service Antenna	RF connection to Service/Mobile antenna
(Service) Coupler (Service/Donor) 40dB	Coupling connectors (40 dB). Used to test input signals from the Base and Mobile antennas.
Donor Antenna	RF connection to Donor/Base antenna
UL 700/800 LNA Output	SMA Male connector - connection to **Main** unit rear panel **UL 700/800 LNA Input** connector
DL 700 LNA Output	SMA Male connector - connection to **Main** unit rear panel **DL700 LNA Input** connector
DL 800 LNA Output	SMA Male connector - connection to **Main** unit rear panel **DL800 LNA Input** connector
DL 800 Pre Input	SMA Male connector - connection to **Main** unit
DL 700 Pre Input	SMA Male connector – connection to **Main** unit rear panel **DL700 Pre Output** connector
UL 700/800 Pre Input	SMA Male connector – connection to **Main** unit rear panel **UL700/800 Pre Output** connector

1.4.3   POWER SUPPLY INTERFACES

The power supply feeds the power DIRECTLY to the Main unit and is provided with 1 to 3 installed (power) modules (for redundancy) which are preconfigured according to the installation.

The figure below shows the Power Supply rear panel.

The figure below shows the Power Supply rear panel. Note that the dipswitches are factory set according to the installation and should not be modified. The **DB25 J1** connector is connected to the **+V DC** and **–V DC (Ret)** connectors from which power is distributed to the Main unit.
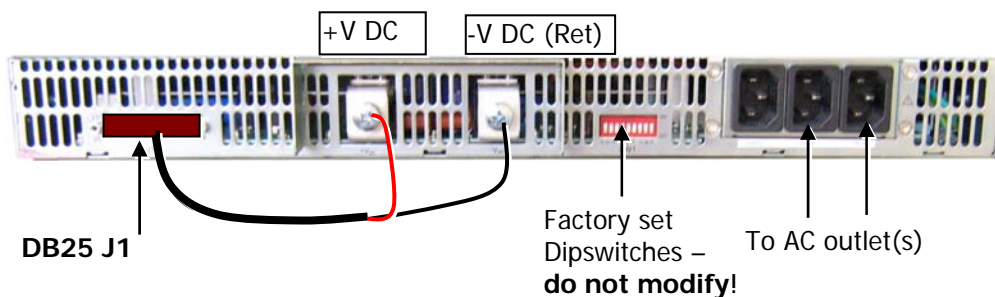
Figure 6. Power Supply Rear Panel

1.4.3.1   Rear Panel

The Power Supply rear panel connectors are accessed from the rear of the cabinet. The following table provides a description of the rear panel connectors.

CONNECTOR	DESCRIPTION
J1	25-pin connector. Output power. **If not already connected, the supplied accessory cable should be connected to +V DC and –V DC Ret**.
AC Main	110/220 AC power connections corresponding to the power units. Each connector corresponds to the parallel internal power supply module.
+V DC and -V DC (Ret)	Connections to the Main unit
SW1	Not Applicable.

1.4.3.2   Front Panel

The Power Supply front panel contains the unit fans and three status LEDs.

Figure 7. Power Supply Front Panel

POWER SUPPLY LED	DESCRIPTION
DC OK	GREEN – NORMAL OPERATION
DC FAIL	RED - MALFUNCTION
AC OK	GREEN – NORMAL OPERATION

2 SITE AND INSTALLATION REQUIREMENTS

This section provides information on the site installation considerations and requirements.

It is recommended to review the procedures described in this section before installing, deploying or operating the system.

2.1 RACK INSTALLATION, ENVIRONMENT AND CABLES

- Follow all local safety regulations when installing the system.
- Follow Electro-Static Discharge (ESD) precautions.
- Install the DMSB 700/800 MHz amplifier close to the service area to monitor the output power and noise figure.
- It is recommended that the installation location be as close as possible to the antenna site in order to minimize cable loss.
- Use low loss cables to perform the RF connections
- Install the units (or place the cabinet with installed units) in a shielded and ventilated area.
- Only trained and qualified personnel should be allowed to install or replace this equipment.
- Verify that ambient temperature of the environment does not exceed 50°C (122°F)
- Ensure that adequate airflow and ventilation within the rack and around the installed components so that the safety of the equipment is not compromised.

2.2 ANTENNA REQUIREMENTS

2.2.1 BASE (DONOR) ANTENNA

The Base (Donor) antenna is usually installed outdoors and is either a directional antenna such as a Yagi or a Panel antenna.

Donor Antenna specifications:

- Yagi type or similar – 10 to 15 dBi gain, very sharp beam pointed to the BTS.
- Cable and jumper loss is at least 2dB.
- The required Base signals should be the dominant signals; at least 6 dB higher power than other signals.
- Example of antenna's typical specifications:

      Gain: 8 dBd (=10 dBi)
      VSWR: < 1:5:1
      Impedance: 50 ohm

2.2.2 MOBILE (SERVICE) ANTENNA

The Mobile antenna is installed indoors.

Note: Before installing the Mobile antenna, see FCC regulations for information regarding recommended distances between the antennas and populated areas.

The following describes the requirements for an omni-directional mobile used for indoor applications.

Specifications:

- Omni directional antenna with 2.2 dBi typical gain.
- Example of omni-directional antenna specifications:

    Gain: 2.2 dBi
    VSWR: < 2:1
    Impedance: 50 ohm

2.3   GROUNDING WIRES REQUIREMENTS

Note: The grounding requirements are only relevant for the rack installation where the system elements are not supplied with the required connections.

Requirements for grounding wires

- Protective grounding conductor - should be aluminum with cross-section 10AWG.
- Lug of the protective grounding conductor - should be aluminum
- Washers and screw - should be high Cr stainless steel, or 12% Cr stainless steel, or Cr on, Ni on steel, tin on steel

2.4   RF CABLE INSTALLATION GUIDELINES

Required:

- For all coaxial connections to/from the Booster - high performance, flexible, low loss 50Ω coaxial communications cable.
- All cables shall be weather-resistant type.
- Cable length - determined by the Booster installation plan. When calculating the cable length, take into account excess cable slack so as not to limit the insertion paths.

3   PHYSICAL INSTALLATION

This section describes the installation procedure for the Dekolink 700/800 DMSB system.

3.1   OVERVIEW

The system is supplied in a cabinet with the required connections.

For this type of system, the installation procedure consists of:

1. Selecting a location for the system according to the requirements described in Chapter- 2 .

2. Unpacking the cabinet system (see3.2)

3. Connecting the Donor and Service antennas (see 3.3)

4. Verifying that the ground is connected (see 3.4)

5. Connecting the wall power outlet to the power-supply (see 3.5)

    Important: Be sure to perform the power supply connection last, otherwise damage may be caused to the system!

6. Commission the system. See Chapter 4 .

It is important to perform the installation procedure according to the order described above.

3.2   UNPACKING

Upon receiving the Deko4078SD Signal Booster, perform the following:

1. Examine the shipping container for damage before unpacking the unit.

2. Perform a visual inspection to reveal any physical damage to the equipment.

3. Verify that all of the equipment (listed below) is included. Otherwise contact Dekolink Wireless Ltd.

Deko4078SD is shipped with the equipment listed in the supplied parts list document.

3.3   CONNECTING THE DONOR AND SERVICE ANTENNAS

CAUTION

DO NOT CONNECT THE ANTENNA CABLES TO THE **B**OOSTER BEFORE VERIFYING THE INSTALLATION PARAMETERS - SPECIFICALLY THE ISOLATION BETWEEN THE ANTENNAS.

DO NOT POWER-ON THE **B**OOSTER (USING THE INTERNAL SWITCH) WITHOUT EITHER THE ANTENNAS BEING CONNECTED OR THE ANTENNA CONNECTIONS TERMINATED WITH DUMMY LOADS.

Note: If the coaxial cables are NOT weather-resistant type, wrap the exterior coaxial cables with insulation and holding tape (Type 3M Rubber splicing tape) for environmental protection and to ensure longer lifetime.

To connect the antennas to the Power Amplifier

1. Install the antenna cables along their path to the Power Amplifier unit, and connect them to the Antennas.

   Note: Be sure to use low loss cables.

2. Connect the Donor antenna to the BASE port.
3. Connect the Service antenna to the MOBILE port.
4. Verify all RF connectors are tightened and the cables and antennas are secured

Figure 8. Power Amplifier and Antenna Connections

3.4   VERIFYING GROUND CONNECTIONS

All of the units' grounding lugs are located on the left side of their rear panels. The Deko4078SD units' ground connections are interconnected and the final grounding connection is performed to the cabinet rack grounding lug located on the left side of the bottom shelf (accessed from the rear). See below.

Figure 9. Final Grounding Connection

In addition, it is required to connect the rack ground to the building ground.

3.5   POWER UP

ATTENTION!
Be sure that grounding is performed properly and
that all required RF connections (Donor and Service
antennas in case of a supplied cabinet installation)
before powering-up the units

1. Connect the power connector on the Power Supply rear panel to a 220/110 VAC power source.
2. Maintain the Main unit in idle state (after power up) for approximately one or two minutes. This time lapse is required for the CPU boot up. After the boot-up process is complete, the SYSTEM READY GREEN LED will light.
3. Verify that the PWR ON LED on the Main unit front panel is GREEN.

Power On
indicator

4 COMMISSIONING THE SYSTEM

This section provides the initialization and setup procedures for the Deko4078SD signal booster. The procedures are performed through an Ethernet connection between the Deko4078SD signal booster and a computer.

Note. This chapter only describes the parameters required to provision the Deko4078SD signal booster. The application window options are fully described in Chapter- 5 .
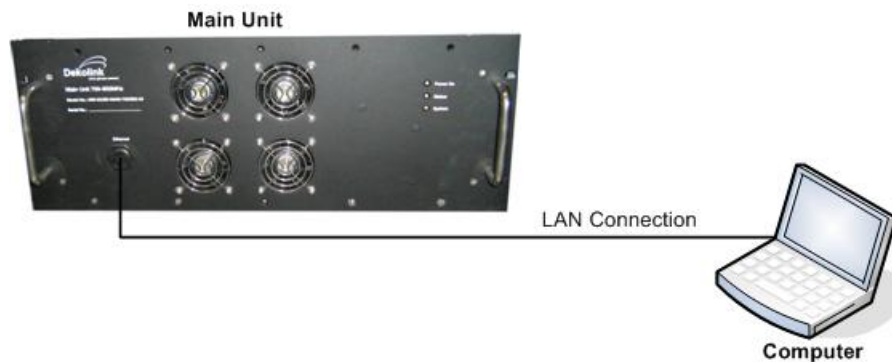
4.1 OPENING A SESSION

4.1.1 CONNECTING THE SIGNAL BOOSTER TO THE COMPUTER

To open connect the Signal Booster to the Computer

Connect the Ethernet cable (supplied) between the Main units' front panel **Ethernet** port (see figure below) and the computer Ethernet port.


Figure 10. Connection to Computer

4.1.2 CONFIGURE THE COMPUTER NETWORK PARAMETERS

You will now configure the computer network parameters to communicate with the Booster. Note that the procedure may vary slightly depending on the operating system installed on your computer. The following procedure is for Windows XP.

To configure the computer's network parameters:

1. Click the **Start** menu and choose **Control Panel**.
2. In the Control Panel, click Network and Internet Connections.
3. Click **Network Connections** and then double-click **Local Area Connection**
   The Local Area Connections Properties dialog appears with the General tab displayed by default.
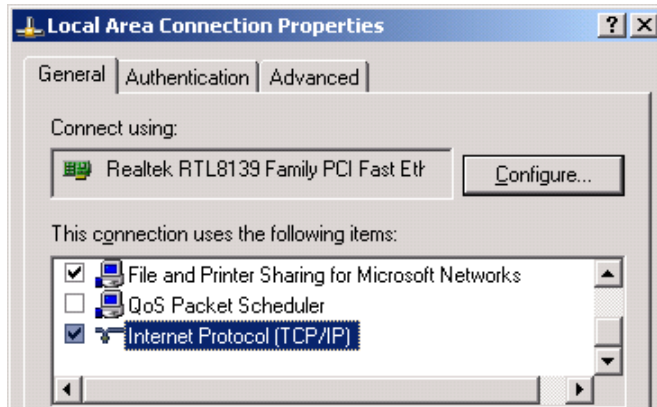
4. In the Items list, select **"Internet Protocol (TCP*IP)"** and click the **Properties** button. The "Internet Protocol (TCP/IP) Properties" dialog appears.

Note: The Booster is supplied with the default IP address 192.168.1.253.

5. Assign your computer an IP address in the same subnet, in order to communicate with the unit.

- In the IP address area:
    - Enter the IP address 192.168.1.x, where 'x' can be any number between 2 and 250 inclusive. For example, (192.168.1.9)
    - Define the subnet mask as shown (255.255.255.0)
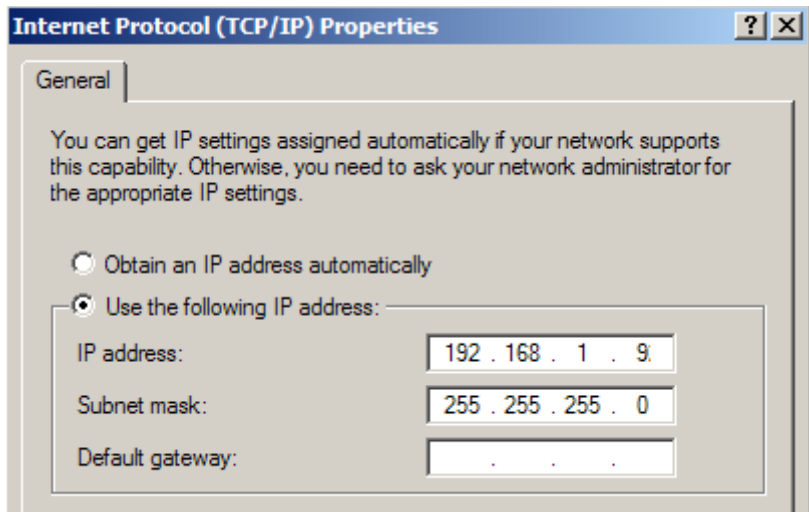
- Click **OK**.

The computer communication parameters are now defined and you can open a session to the Booster.

4.1.3   LOGIN TO THE SIGNAL BOOSTER

NOTE: The booster is factory assigned the address 192.168.1.253. You will login for the first time using this address and make the necessary modifications according to information provided by your network administrator.

To login to the booster

1. Open one of the Flash-enabled browsers listed in the system requirements.

2. In the address line, enter the provided IP address of the Booster. A session will be established with the Booster an the login dialog appears.

3. Type the default User Name **admin** and the default Password **admin**

Note: Both User name and Password are case sensitive and must be entered with lower case letters.

4. Click **Login.** The application main window appears.

4.2 COMMISSIONING THE SYSTEM

The commissioning procedure consists of the following steps *for each* Deko4078SD:

1. Configuring the Booster parameters
2. Verifying that there are no alarms in the alarms area of the management application and configuring the signal booster general parameters.
3. Configuring the required filters
4. Configuring the Modem parameters (if installed)

4.2.1 CONFIGURING THE BOOSTER PARAMETERS

1. Click the *General* tab of the **Settings** window and verify that the UL and DL bands in the **General** field area are enabled.
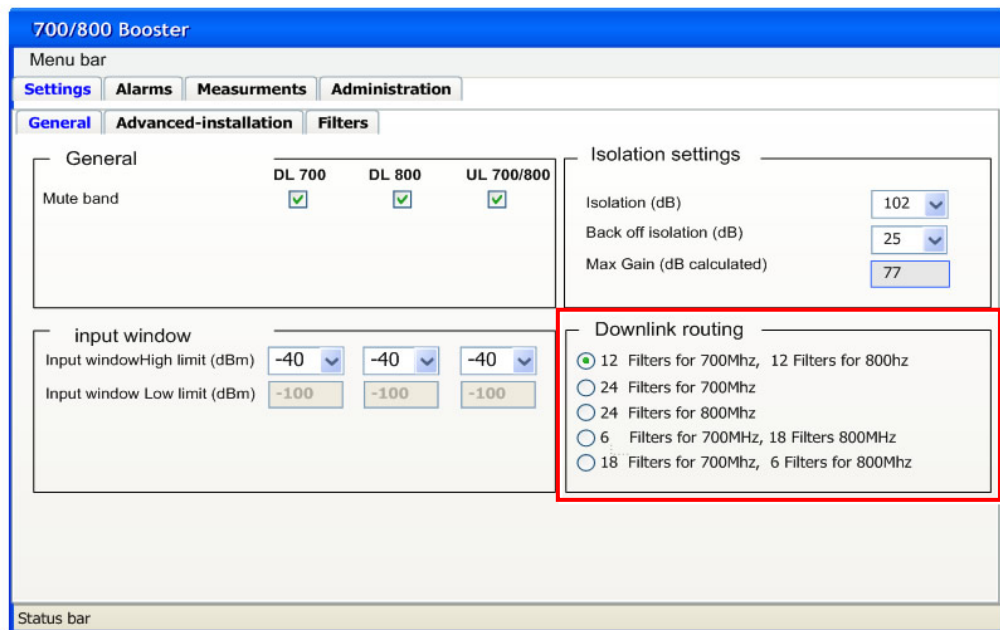

Figure 11. General Settings Tab

2. In the *Isolation Settings* field area, determine the **Isolation** and **Back off isolation** parameters. The application calculates the **Max gain** (dB) accordingly.

3. In the *Input Window* field area, configure the **Input window High Limit** parameter which determines the signal boosters' signal range. The **Low limit** is automatically determined according to the configured *High limit*.

Note: The attack and release times can be configured. See *Step 5*.

4. Determine the number of filters to be allocated for each band. Select the required filter configuration in the **Downlink Routing** field area.

Note: The default setting is *12 Filter for 700MHz, 12 Filters for 800MHz*.

The filter configuration selected here determines the maximum number of filters that can be added when configuring the filters for the 700 and 800 bands (see 4.2.3).

5. Click the **Advanced Installation** window and define the parameters displayed in the *General* (i.e. *in Path offset*) and *Marker Tone, PL Mode* (For analog – FM) field areas. In addition, the *Attack* and *Release* times can be configured for the input signal range determined in the *General Settings* tab.
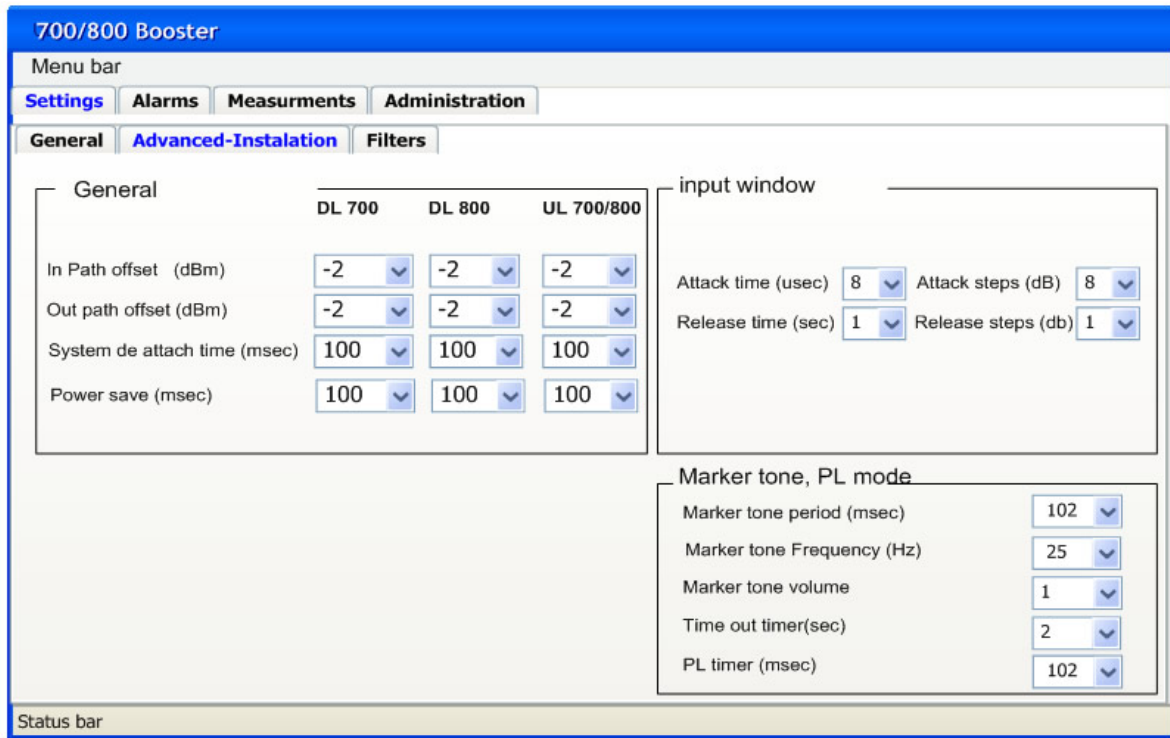

Figure 12. Advanced Installation Tab

4.2.2   VIEWING ALARMS

Click the **Alarms** tab and verify that all the alarms displayed in the *Summary View* screen are green.

Figure 13. Alarms Summary View

4.2.3   CONFIGURING THE FILTERS

The DMSB Management Tool enables selecting up to a total of 24 filters for the 700 and 800 bands and provides five available configuration options to choose from (downlink routing). The default downlink routing setting is *12 filters for 700MHz, 12 Filters for 800MHz*. Upon initial installation there are no filters listed and they must be added. In addition, when the user re-routes the system, the filter assignment map is deleted and must be reset.

To configure the required filters

Note: The number of filters that can be defined depends on the selected *DL Routing* configuration (see 4.2.1 step 4). For example, if the *12 filters for 700MHz, 12 Filters for 800MHz* option was selected then the maximum number of filters that can be added for each band is 12.

1. Click the **Filters** tab of the *Setting* window, the following window appears.
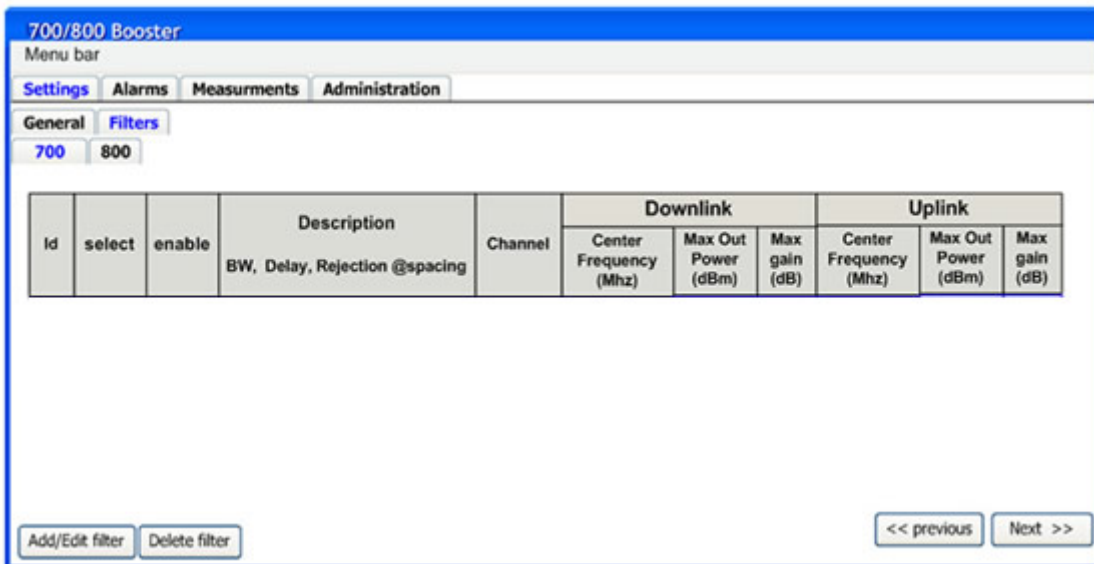

Figure 14. Filters Tab

Note: The filter configuration for the 700 and 800 bands is performed for each one in their corresponding windows.

2. To add a filter, click the **Add/Edit Filter** button. The following window appears.
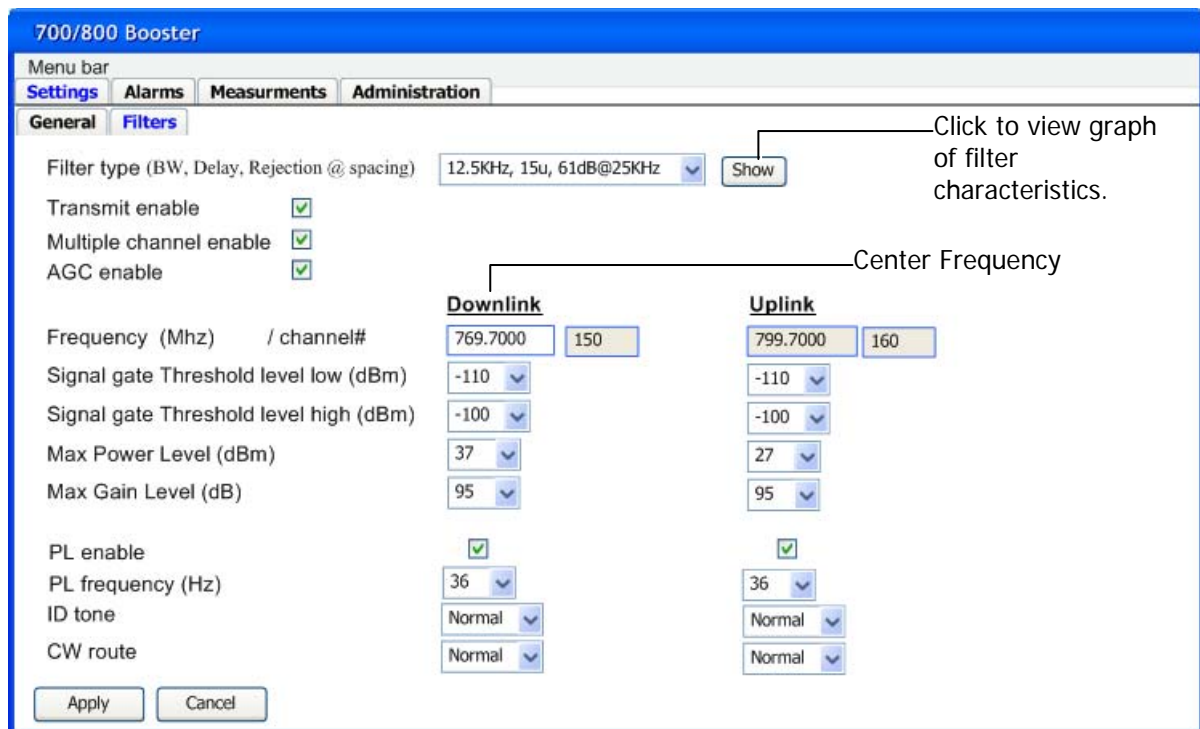
Figure 15. Add/Edit Filter Window

The filter parameters are displayed with default values, however these may be modified. Note that the filter **PL enable** parameter is *disabled* by default.

3. Select the required filter from the **Filter Type** field drop-down list according to the following:

   - Bandwidth
   - Delay
   - Rejection at spacing

   Note: The Filter screen includes a **Show** button that provides several display types (i.e. filter pass band and rejection plots), enabling viewing the filter properties and characteristics to ensure a proper selection of the filter.

4. Define the DL center frequency in the **Frequency** field. The corresponding UL center frequency is automatically defined.

5. Verify that the **Transmit Enable** checkbox is enabled.

   Note 1: If the **Transmit Enable** parameter is not enabled then the filter will be defined but not operable.
   Note 2: The maximum output power of a channel depends on the number of defined filters. Upon defining new filter, the system will provide a warning regarding the new limit of maximum output power available for each filter.

6. The default filter **Max Gain** value displayed is the Maximum Gain calculated according to the isolation settings (see section 4.2.1 step 2). This value can be modified, however the filter Maximum Gain cannot be higher than that calculated according to the booster isolation settings. If a higher maximum gain value is required the isolation settings must be modified accordingly.

7. Click **Apply**. The selected filter and description are displayed, as shown below.

700/800 Booster

Menu bar

Settings | Alarms | Measurments | Administration

General | Filters

700 | 800

Id	select	enable	Description BW, Delay, Rejection @spacing	Channel	Downlink			Uplink		
					Center Frequency (Mhz)	Max Out Power (dBm)	Max gain (dB)	Center Frequency (Mhz)	Max Out Power (dBm)	Max gain (dB)
1	☑	Yes	12.5KHz, 15u, 61dB@25KHz	150	769.5000	37	77	799.5000	27	77
2	☐	Yes	12.5KHz, 15u, 61dB@25KHz	151	770.5000	25	76	801.5000	15	76
3	☐	Yes	25KHz, 30u, 61dB@25KHz	152	771.5200	25	77	806.5000	15	77
4	☐	Yes	50KHz, 15u, 61dB@25KHz	153	772.5500	25	77	810.5000	15	77
5	☐	Yes	12.5KHz, 15u, 61dB@25KHz	154	773.0000	25	76	815.5000	15	76
6	☐	Yes	12.5KHz, 15u, 61dB@25KHz	155	774.0000	25	77	820.5000	15	77

Add/Edit filter | Delete filter

<< previous | Next >>

Figure 16. Filter Description

4.2.4   CONFIGURING THE MODEM PARAMETERS

NOTE: This section is relevant only if a modem is connected.

1. Click the **Deko-CMU Communication** tab of the *CMU* window. The following window appears.

Figure 17. Communication Parameters Window

2. Define the following modem communication parameters:
    - Communication – Fixed IP
    - Local Phone Number
    - Remote Phone Number
    - Modem Password
3. Click **Apply**.

4.3   VERIFYING SITE COVERAGE

Once the installation is complete, verify coverage on site.

Deko4078SD enables you to transmit an ID tone on each channel in order to verify coverage on that channel using a continuous tone. See section 6.1.