Quick Start Guide MSD100C

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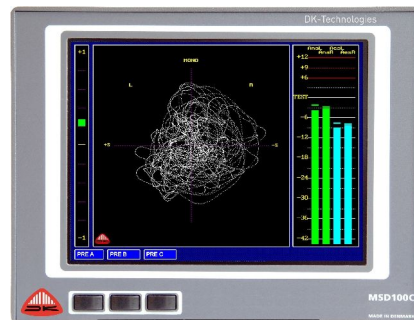
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Preface.

Your MSD100C is capable of measuring in both the analogue and the digital domain according to requirement issued by broadcast stations and international standard institutes worldwide. Through the build-in preset selection menus or the pc-based configuration software the unit can be customized to user specific requirement.

Installation.

The Audio signals must be soldered to the 25-pin male DSUB connector holding the pre-connected power supply. The cabinet rear side has an optional VGA connector and a 9-pin connector for RS232 communication. The later is used for communication with an external PC. Please refer to Appendix A for wiring details.

Getting Started.

Your MSD100C has been loaded with a preset package suiting the most common used scales in your area. When booting your MSD for the first time, you will notice that the instrument starts up in an analogue input mode with a corresponding analogue scale.
The default preset from the factory is *PRE A* being the leftmost key on the front of the MSD. The other two presets denoted *PRE B* and *C* holds a pure digital preset and a combined analogue and digital preset.
Please refer to Appendix A for an overview of the preset package loaded into your meter.
Customers in the US and Germany please refer to the US and DE preset packages.

The On-Screen Configuration.

The daily operation of the MSD100C is via the three softkeys *PRE A* to *C* as these operate via a single keystroke for preset selection. However the softkeys on the front can be expanded into a configuration menu by double-clicking the appropriate key. Once in the menu you can scroll up and down the pick list and assign the function with the *ASSIGN* key. The default power up condition is defined by the last assignment. This feature enables you to access all of the 11 presets available in the MSD100C where as only 3 presets are available directly on the front via *PRE A, PRE B, PRE C*.
Using this operation you can easily set your meter up to other scales, input modes and more.

The Off-Line Configuration Software.

In the box containing the MSD100C you will also find a CDROM with the program
MSD-CFG.EXE. This software can be used on PC's running Windows98™, Windows2000™ and Windows XP™.

Please refer to the supplied manual "MSD-Config for the MSD100C" for full information.

Before running the MSD-CFG program please notice the following:

- Set the PC screen to a resolution of at least 800x600 and 256 colours
- Terminate all other programmes on the PC
- Do not touch the MSD softkeys while up/downloading via the PC
- Please connect your MSD100C to the PC's COM port with the supplied cable

When the supplied CDROM is inserted into the CDROM drive of your PC, the autorun function will call your explorer and you will be able to see the contents of the CDROM.

The MSD-CFG program can be used directly from the CDROM, but if you wish to store changes or preset packages, you will need to do this in an appropriate folder on your
hard-drive.
You can run the MSD-CFG.EXE program without a MSD100C connected to the PC, but you will then only be able to save any changes to a file for later downloading to the MSD.

Please note that the default colour settings have been adjusted to show digital readings as yellow and analogue readings as green (Phase oscilloscope and PPM bars). This is just to show some of the possibilities. Any given colour coding can be set to your preference.

We encourage you to run the MSD-CFG to get a feeling of the many possibilities with your new MSD100C instrument. Please also study the examples in Appendix A.

Appendix A

MSD100C Pin configuration, 25 pole DSUB connector.

The supplied female XLR connectors must be connected to the below given chart.
Alternatively a readymade cable can be ordered as part no.: MSD100C-CABLE/O

XLR		Analogue		Digital
		Left	Right	AES/EBU
Pin 1	GND	2	16	9
Pin 2	Hot	14	15	21
Pin 3	Cold	1	3	22

25 pole DSUB Audio connections.

Power	
+Vcc. (12-15VDC)	25
Power Ground	12

25 pole DSUB Power connections.

MSD100C Preset packages.

For easy start up your MSD100C has been delivered with a preset package that suits the most common usage in your area. The three preset packages are:

MSD100C US.PRE   For users in the US and North America
MSD100C DE.PRE   For users referring to the German DIN standard
MSD100C INT.PRE   For international users primarily referring to European standards

The three presets are all to be found on the supplied CDROM in the folder PRESETS. Changing to another region will change the scale package as well as the offset for the instrument so suit the standard in the region.

MSD100C US.PRE contains:

Preset	Name	Phasemeter/Oscilloscope		PPM Section		Scale
		Input	Colour	Group 1	Group 2	
1	ANA NBC	A	Green	A	OFF	NBC
2	ANA ABC	A	Green	A	OFF	ABC
3	ANA 40A	A	Green	A	OFF	40A
4	ANA 40C	A	Green	A	OFF	40C
5	DIG NBC	D	Yellow	D	OFF	NBC
6	DIG ABC	D	Yellow	D	OFF	ABC
7	DIG 40A	D	Yellow	D	OFF	40A
8	DIG DMU1	D	Yellow	D	OFF	DMU1
9	A+D 40A	A	Green	A	D	40A
10	D+A 40A	D	Yellow	A	D	40A
11	D+A DMU1	D	Yellow	A	D	DMU1

A denotes Analogue input - D denotes Digital input

Available scales in the US preset.						
Scale #1	Scale #2	Scale #3	Scale #4	Scale #5	Scale #6	Scale #7
DMU1	NBC	ABC	40A	VU	40C	REF

Softkey assignment: PRE A   Preset #3   ANA 40A   Booting default preset
                             PRE B   Preset #8   DIG DMU1
                             PRE C   Preset #9   A+D 40A

MSD100C DE.PRE contains:

Preset	Name	Phasemeter/Oscilloscope		PPM Section		Scale
		Input	Colour	Group 1	Group 2	
1	ANA DIN	A	Green	A	OFF	DIN
2	ANA Nordic	A	Green	A	OFF	Type I
3	ANA EBU	A	Green	A	OFF	Type IIB
4	ANA VU	A	Green	A	OFF	VU
5	DIG DIN	D	Yellow	D	OFF	DIN
6	DIG DMU1	D	Yellow	D	OFF	DMU1
7	DIG EBU	D	Yellow	D	OFF	Type IIB
8	A+D DIN	A	Green	A	D	DIN
9	D+A DIN	D	Yellow	A	D	DIN
10	A+D DMU1	A	Green	A	D	DMU1
11	D+A DMU1	D	Yellow	A	D	DMU1

A denotes Analogue input - D denotes Digital input

Available scales in the German preset.						
Scale #1	Scale #2	Scale #3	Scale #4	Scale #5	Scale #6	Scale #7
I	IIA	IIB	DIN	VU	DMU1	DMU2

Softkey assignment: PRE A   Preset #1   ANA DIN   Booting default preset
                     PRE B   Preset #5   DIG DIN
                     PRE C   Preset #8   A+D DIN

MSD100C INT.PRE contains:

Preset	Name	Phasemeter/Oscilloscope		PPM Section		Scale
		Input	Colour	Group 1	Group 2	
1	ANA NORDIC	A	Green	A	OFF	Type I
2	ANA EBU	A	Green	A	OFF	Type IIB
3	ANA BBC	A	Green	A	OFF	Type IIA
4	ANA VU	A	Green	A	OFF	VU
5	DIG NORDIC	D	Yellow	D	OFF	Type I
6	DIG EBU	D	Yellow	D	OFF	Type IIB
7	DIG BBC	D	Yellow	D	OFF	Type IIA
8	DIG DMU1	D	Yellow	D	OFF	DMU1
9	A+D NOR	A	Green	A	D	Type I
10	D+A NOR	D	Yellow	A	D	Type I
11	D+A DMU1	D	Yellow	A	D	DMU1

A denotes Analogue input - D denotes Digital input

Available scales in the International preset.						
Scale #1	Scale #2	Scale #3	Scale #4	Scale #5	Scale #6	Scale #7
I	IIA	IIB	DIN	VU	DMU1	DMU2

Softkey assignment: PRE A   Preset #1   ANA NORDIC Booting default preset
                     PRE B   Preset #8   DIG DMU1
                     PRE C   Preset #9   A+D NOR