

# MusicTAXI SL **PRO**

**Manual**

**V2000/V4.14**

## **DIALOG4**

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# Table of Contents

<b>Certification / Labelling</b>	<b>6</b>	ISDN Sync	
<b>Getting Started</b>		Algorithm	
<b>Introduction and Installation</b>	<b>7</b>	Bit Rate	
<b>Front Panel / Keypad</b>		Sampling Rate	
Explanation of Keypad symbols	8	Audio Mode	17
<b>Rear Panel</b>		Audio Input	18
<b>Audio Interface Connections</b>		User Data	18
Balanced Audio Input		ISDN Configuration	
Balanced Audio Output		ISDN Protocol	
Digital In-/Output (AES/EBU standard)	9	Accept Telephone Calls	
Digital In-/Output (S/PDIF standard)		Accept MPEG/G.722 Calls	19
<b>Data Interface Connections</b>		MSN Check	
External Synchronisation		Local Numbers	20
Serial Synchronous Interface (X.21)	10	SPID Numbers	
RS232/RS422, Serial Asynchronous		I/O Levels	21
Interface (REMOTE)	11	Misc	
Alarm/Control Interface		Alarm Signals	
In-/Output Wiring	12/13	Level Range	
RS232/RS422, Serial Asynchronous		Headroom	
Interface (ANCILLARY)	14	External Sync Input	22
Standardized Connectors		Automatic X.21 Start	
to ISDN Network		Backup Settings	23
Power Supply	15	Examples of Applications	
<b>System Setup</b>		by Using Backup Settings	24
Programm Configuration		Panic Dial	
Configuration of the		X.21 Clock Monitoring	25
connected MusicTAXI		Redialing	
in SYSTEM SETUP		Dialing Attempts	
Accept Configuration	16	Dialing Delay	
		Redialing Attempts	26

## Data Input

Enter New Recipient	27
Edit Recipient	28
G.722 with H.211 or SRT SYNC X.21 Mode	
CODEC LOOP	29
Delete Recipient Info	
Update	30

## PC Connection

Serial Cable (KB003) to PC System Requirements	
Note	31

## MT Remote/ Software Installation 32

### Software Update

Dialogbox by Update	33
SL-PRO Update Interrupted DSP Software System Software Hardware Configuration	
Boot Software	34

### Jumper Settings

Important Jumper Settings on the Main Board	
Input Impedance	
Switch over RS232/RS422	
X.21 Operation	35

## Connection Establishment

### Connect

Establishing a Connection Using the Telephone Directory	36
--	----

X.21 Connection Establishment CODEC LOOP Connection Establishment	
Call Acceptance in Standby Mode	37

### Explanations

Call Acceptance with ISDN SYNC AUTO	
Connection Establishment with ISDN SYNC AUTO	
Connection Establishment with CODEC LOOP	
X.21 Operation	38

### Connection Monitoring

SYNC Display	
--------------	--

## Disconnection 39

### Audio Compatibility

LAYER 2 with 64 kbps	
LAYER 2 with 128 kbps	
LAYER 3 with 64 kbps	
LAYER 3 with 128 kbps	
G.722 with 64 kbps	40/41

## Status Messages 41

## ISDN Error Codes 42/43/44

## Technical Data 45

### Scope of Delivery

Versions	
Optional Accessories	
Guarantee	
MusicTAXI Test Number	
Maintenance and Hotline	46



The certification Body of the TÜV Management Service GmbH certifies that DIALOG4 System Engineering GmbH, Ludwigsburg, has established and applies a quality system for Research & Development of MPEG related hard- and software products for the professional and consumer market, production management, quality control, sales and after-sales service. An audit was performed, report no. QM-F-98/1461. Proof has been furnished that the requirements according to DIN EN ISO 9001:1994 are fulfilled.



The MusicTAXI SL-PRO is designed according to protection class 1 (EN 60950/VDE 0805/IEC 950). It is manufactured according to the electrotechnical regulations and fulfils the regulations for preventions of accidents 'Electrical Systems and Materials' (VBC4, §5 paragraph 4).



A Declaration of Conformity constitutes that the MusicTAXI SL-PRO corresponds to the EC directive: EMV 89/336/ EWG as well as the 'low voltage regulation' 73/23/EWG with applied harmonised standards.



The MusicTAXI SL-PRO is designed according to the EMC directive (or regulations for the electromagnetic compatibility) with the harmonized standards DIN EN 55103-1 (June 97) interference radiation, ambiance E1 and DIN EN 55103-2 (June 97) resistance to jamming, ambiance E5.



Taking into consideration the demand on resistance to jamming, for the quality and impairment the intensity degree 4 of the 5-stage scale of the ITU/R recommendation 500-4 applies.

The MusicTAXI is a telecommunications unit and has with the 'CE 168 X' labeled ISDN module an EC approval and a national approval for EURO ISDN with the number: A 120371F.

## Note on EMC Measures

According to the requirements of the EMC directive, the regulations for the electromagnetic compatibility, it is necessary that the following measures have to be observed when using/manufacturing the connection cables:

- For all connections shielded cables should be used (with respect to the audio cables the well-known EMT 211 has proven its worth).
- The shields should be soldered to the GND connections and additionally to the connector shell directly.
- For the 3-pole audio sockets/plugs (type XLR) the respective counter sockets/plugs, manufactured by NEUTRIK, should be used.
- The connection of pin 4 housing are to be connected to pin 1 ground, shield.

**Installation** The MusicTAXI SL-PRO is designed for installation into 19" racks. Installation with additional mounting rails is recommended because of the depth of the unit. No ventilation or internal cooling for the MusicTAXI SL-PRO is necessary nor active cooling of multiple units in 19" racks. No additional distance to other apparatus has to be observed.

**Climate** Operating temperature: -10 to +45 degrees Celsius  
Relative Humidity: 30-90%.

**ISDN Cabling** Correct operation of the MusicTAXI SL-PRO is only guaranteed when the ISDN cables, which are included in the scope of delivery, are used.

**ISDN Connection** Correct operation of the MusicTAXI SL-PRO is only guaranteed when the MusicTAXI is connected to an approved Telecom access. When connecting the unit to a private exchange, several adjustments are necessary. Please see chapter SYSTEM SETUP for further tips and instructions. Adaptation to certain networks other than herewith specified cannot be guaranteed.

**Please note** This manual is for the use of the owners and their staff only. The information in the manual, including all texts and drawings, are to be treated as confidential, and are not to be reproduced, translated or published. The original documentation, its contents or any parts of it are not to be passed on to third parties or copied in any form. Hereby the right to registered utility models or patent application is reserved explicitly. In the case of violation or non-compliance resulting in consequential losses, DIALOG4 may be entitled to claim damages according to the German BGB, HGB as well as the competition law and Patents Act.

Due to the further development for product improvement of the present series units and alterations of certain industrial parts, it cannot be avoided that some parts might not be fully compatible.

All technical alterations may be subject to change without notice.

# Getting Started

## Front Panel / Keypad



### Explanation of Keypad Symbols

#### SYNC OK



Display of the decoder Sync flag. If this LED lightens, the decoder receives correct data from the partner unit.

#### MODUS



**X.21** Shows a X.21 connection.

**ISDN** Shows an ISDN connection.

For CODEC LOOP none of the above displays are active.

#### STATUS

#### CLOCK ERROR

Only for X.21 connection. Shows that there is either no clock at the X.21 connection or a clock with the wrong frequency.

#### CON

Only for ISDN connections. Shows that at least one B-channel is connected to the partner unit.

#### OK



For X.21: connection established.

For ISDN: ISDN connection synchronized.

The connection is fully established as soon as the SYNC OK LED lightens additionally.

#### REJ

Only for ISDN: connection could not be established.

#### HANG UP



By pressing this key a connection can be disconnected. It has no function, if no connection had been established. If the key is pressed for the first time, the STANDBY LED flashes. The HANG UP key has to be pressed again within 10 seconds to disconnect the line.

#### STANDBY

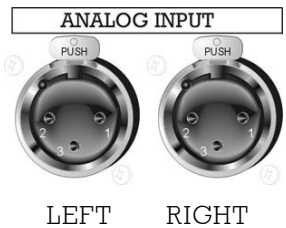
Shows that the unit can be called or can establish a connection itself.

# Getting Started

## Rear Panel / Audio Interface Connections



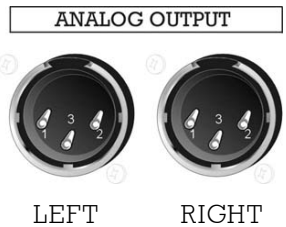
### Balanced Audio Input



Level Range: adjustable via SYSTEM SETUP from -4 dBu to +21 dBu (pls. see pages 16/17) (+12 dBu ex factory)  
 Input Imped.:  $\geq 10$  kohms (switchable over to 600 ohms) jumper JP 201/202 (pls. see page 31)  
 Connector: XLR (female)

Pin	1	2	3
Assignment	GND	IN (+)	IN (-)

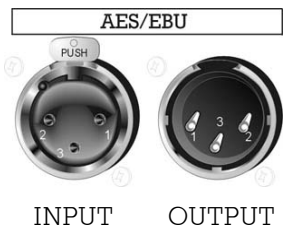
### Balanced Audio Output



Level Range: adjustable via SYSTEM SETUP from -4 dBu ... +21 dBu (pls. see pages 16/17) (+12 dBu ex factory)  
 Output Impedance:  $< 50$  ohms  
 Connector: XLR (male)

Pin	1	2	3
Assignment	GND	OUT (+)	OUT (-)

### Digital In-/Output (AES/EBU standard)



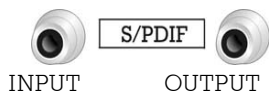
Level Range: according to IEC 958, prof. format  
 Connector: XLR (female/male)

Pin	1	2	3
Assignment	GND	IN/OUT(a)	IN/OUT(b)

# Getting Started

## Data Interface Connections

### Digital In-/Output (S/PDIF standard)



Connector: RCA (female/female)

Pin Assignment	Center Pin IN/OUT	Ring GND
----------------	-------------------	----------

### External Synchronisation

EXTERNAL SYNC



INPUT OUTPUT

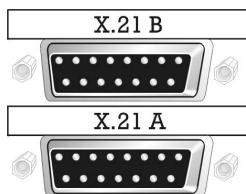
adjustable via SYSTEM SETUP

Connector: BNC (male/male)

Signal Level: TTL

Pin Assignment	Center Pin IN/OUT	Ring GND
----------------	-------------------	----------

### Serial Synchronous Connection



for the transmission of coded audio data to an external data transmission unit, e.g. terminal adapter or satellite modem.

Transmission Rate: 8 kbps to 384 kbps

Connector: 15-pole Sub-D

Pin	1	2	3	4	5
Assignment	NC	Tx (a)	CTR (a)	Rx (a)	IND (a)
Function*		O	O	I	I

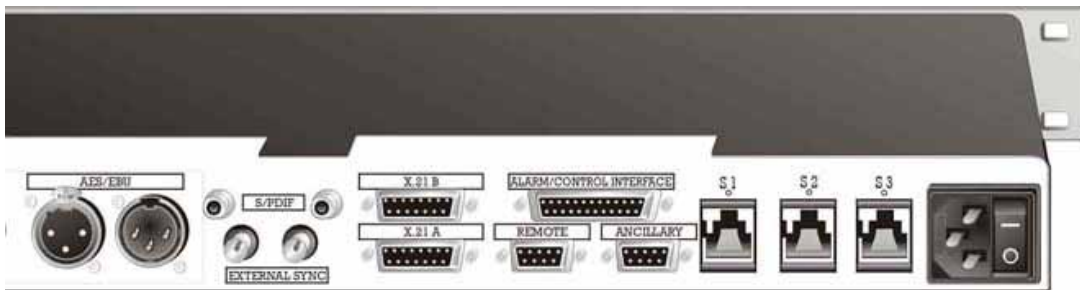
Pin	6	7	8	9	10
Assignment	CLK (a)	NC	GND	Tx (b)	CTR (b)
Function*	I			O	O

Pin	11	12	13	14	15
Assignment	Rx (b)	IND (b)	CLK (b)	NC	NC
Function*	I	I	I		

\* relating to MusicTAXI      O=Output      I=Input

**Please note** Only use X.21A! To X.21B no function is assigned.





### RS232/RS422 Serial Asynchronous Interface



to control the MusicTAXI using an external PC  
(pls. see also chapter PC Connection, page 31).  
Switch over from RS232 to RS422: Jumper J3 to 1+2  
(pls. see also chapter Jumper Settings, page 35).  
Format RS232/RS422:     9600 baud  
                                  8 data bits  
                                  1 stop bit  
                                  no parity

Connector:                   9-pin Sub-D

Pin	1	2	3	4	5
Assignment	<b>Tx+</b>	<b>RC_Tx</b>	<b>RC_Rx</b>	<b>Rx-</b>	<b>GND</b>
RS232		■	■		■
RS422	■			■	■
Function*	<b>O</b>	<b>O</b>	<b>I</b>	<b>I</b>	

Pin	6	7	8	9
Assignment	<b>Tx-</b>	<b>NC</b>	<b>NC</b>	<b>Rx+</b>
RS232		■	■	
RS422	■			■
Function*	<b>O</b>	<b>I</b>	<b>O</b>	<b>I</b>

\* relating to MusicTAXI

■ =not to be used!   ■ =assigned   O=Output   I=Input

#### Attention

For RS232 internal signals are assigned to pins 2, 3 and 5, for RS422 to pins 1, 4, 5, 6 and 9!

**A fully assigned 1:1 cable to the PC might result in the damage of the PC and/or MusicTAXI!**

Please use only cables as described above.

# Getting Started

## Data Interface Connections

### Alarm/Control Interface



The switching commands of the MusicTAXI's input are transmitted and made available as open collector signals at the partner unit. The in- and outputs (same as GND connections 13, 25) are electrically isolated via optoelectronic coupler.

Connector: 25-pin Sub-D

Pin	1	2	3	4	5
Assignment	NC	NC	NC	IN8	GND
Function*				Red-Light IN	

Pin	6	7	8	9	10
Assignment	IN7	IN6	IN5	IN4	IN3
Function*	Reset	(Index)	FF	Rew	Stop

Pin	11	12	13	14	15
Assignment	IN2	IN1	IN GND	NC	NC
Function*	Record	Play	**		

Pin	16	17	18	19	20
Assignment	VCC	OUT8	OUT7	OUT6	OUT5
Function*	+5V	Red-Light	Reset	(Index)	FF
System Setup***			DIS	CON	

Pin	21	22	23	24	25
Assignment	IN2	IN1	IN GND	NC	NC
Function*	Rew	Stop	Record	Play	****

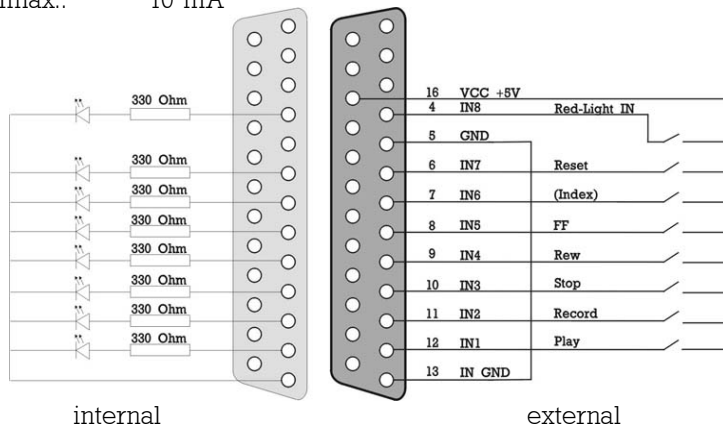
- \* relating to MusicTAXI
- \*\* common earth for all inputs
- \*\*\* pls. see ALARM SIGNALS (page 22)
- \*\*\*\* common earth for all outputs

# Getting Started

## Data Interface Connections

### Input Wiring

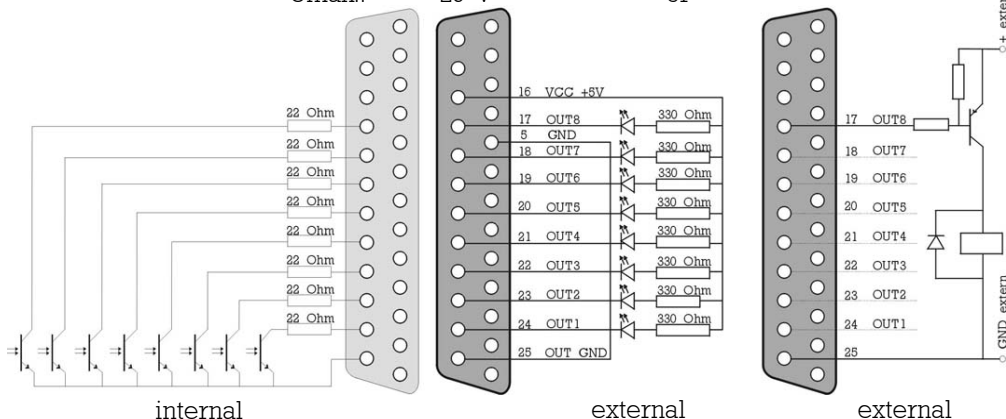
Imax.: 10 mA



### Output Wiring

Imax.: 10 mA

Umax.: 25 V



#### Please note

The recommended functions for the in- and outputs correspond to the assignment of various MusicTAXI users. In order to remotely control external equipment connected to MusicTAXIs without any problems, this assignment should be taken over.

#### Attention

When manufacturing a connection cable for the interfaces ALARM CONTROL INTERFACE and ANCILLARY, the respective connector shells (width:  $\leq 15$  mm) have to be used:

\* e.g.: Farnell Electronic Components GmbH,  
D-82041 Deisenhofen  
FAX: 089 / 613 5901

Type/Pol	Sub-D Shell	Order No*
<b>9-pole</b>	<b>DTZK-9-K</b>	<b>463-012</b>
<b>25-pole</b>	<b>DTZK-25-K</b>	<b>463-036</b>

# Getting Started

## Data Interface Connections

### RS232/RS422 Serial Asynchronous Interface



to transmit user data via MusicTAXI.

Format: 0 ... 9600 baud (pls. see table)  
8 data bits  
1 stop bit  
no parity

Table of the implemented ancillary data from software V4.10 on

Data rate: (kbps)	8	16	24	32	48	56	≥64	≥128
Layer 2: (baud)	0	1200	1200	2400	2400	2400	4800	4800
Layer 3: (baud)	0	1200	1200	2400	2400	4800	4800	9600

#### Please note

If the software version of both MusicTAXIs is >V4.10, the calling unit determines the data rate. If the software version of one of the MusicTAXIs is <V4.10, this unit determines the data rate, irrespective of which unit had established the connection (between 0 and 1200 baud).

Connector: 9-pin Sub-D

Pin	1	2	3	4	5
Assignment	NC	R_Tx	R_Rx	NC	GND
Function*		O	I		

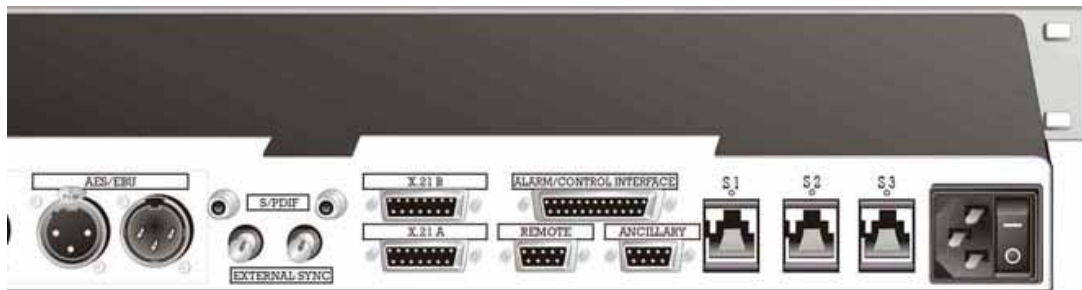
Pin	6	7	8	9
Assignment	NC	RTS	CTS	NC
Function*		■	■	

\* relating to MusicTAXI

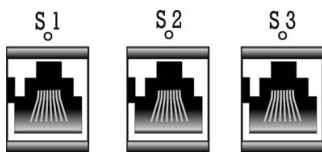
O=Output I=Input  
■ =not to be assigned!

#### Attention

Internal signals are assigned to pins 7 and 8. These pins should not be connected!



### Standardized Connectors to ISDN Network



Transmission Rate: 2 x B + D channel per S<sub>0</sub>

Connector: RJ45

(ISDN network cable included).

Pin	3	4	5	6
Assignment	T+	R+	R-	T-

#### Please note

The ISDN interfaces have to be used in incremental sequence.

### Power Supply

100- 240 V AC, 50 / 60 Hz, 0.18 - 0.10 A, max. 25 VA



The MusicTAXI SL-PRO has a switching power supply unit. Therefore a voltage selector switch is not necessary.

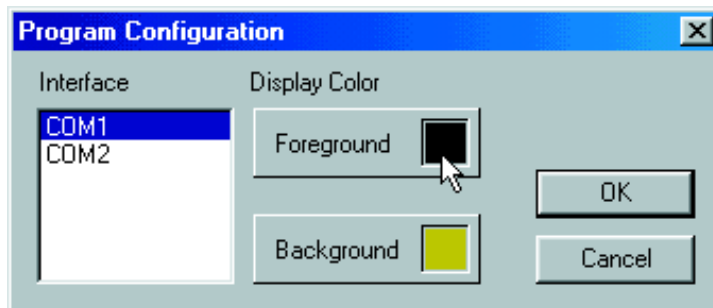
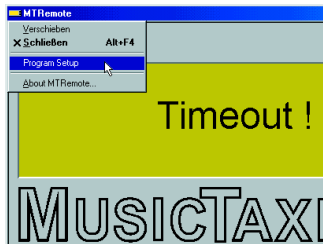
Power Supply Fuse: 3.15 A in power supply.  
Type Schurter MXT 315.

### Connection

3-pole socket  
(power supply cable included)

# Getting Started System Setup

## Program Configuration



A left mouse click of the MTRemote icon (top left) opens a pulldown menu. This configuration is only necessary if TIMEOUT! is displayed and not STANDBY or if you want to change colors. With the menu item PROGRAM SETUP you can adapt the interface from the MusicTAXI to the PC and adjust the display colors. Confirm with OK..

## Configuration of the connected MusicTAXI in SYSTEM SETUP

Select SETUP from the main menu. The 7 pages of the basic configuration menu of the connected MusicTAXI appear.



For units without ISDN the menu is only 2 pages long.

## ACCEPT CONFIGURATION

(available only for units with ISDN)

This sets up the call accept mode of the MusicTAXI SL-PRO. You can either set the accept mode more or less specific for the unit and transmission permanently. Then the MusicTAXI only accepts calls in the respective configuration. Or you can select the operation mode AUTO(matic Codec Detection). Then the MusicTAXI serves as a SLAVE and takes over the parameters of the calling unit automatically.

The AUTO mode is not available for AUDIO INPUT and USER DATA.

**ISDN Sync** The **ISDN SYNC** menu serves for setting the desired synchronization procedure. You can select between:

MusicTAXI (DIALOG4 Sync for 1 to 6 B-channels)  
PRIMA (CCS SYNC for 2 B-channels)  
ZEPHYR (Telos SYNC for 2 B-channels)  
NO SYNC when using 1 B-channel  
NO SYNC (INV) when using 1 B-channel  
AUTO - Automatic Codec Detection

**Please note** By selecting PRIMA or ZEPHYR accept mode, a G.722 call cannot be received.

**Algorithm** The **ALGORITHM** menu item serves for setting the desired data reduction procedure. You can select between:

Layer 2  
Layer 3  
AUTO (G.711/G.722 calls are also accepted).

**Bit Rate** The transmission **BITRATE** cannot be set. According to the number of incoming B-channels, the transmission rate is determined and set accordingly (AUTO is always set).

**Sampling Rate** The **SAMPLING RATE** menu item serves for setting the desired sampling frequency when calls are coming in. You can select between:

16, 22.05, 24, 32, 44.1, 48 kHz  
AUTO (the sampling frequency of the calling unit is taken over).

**Audio Mode** The menu item **AUDIO MODE** serves for setting the desired channel mode, when calls are coming in. You can select between:

MONO                      Mono signal. The left input is used

DUAL MONO              Two different signals which do not interfere with each other, e.g.  
One channel - O sound  
One channel - translation

# Getting Started System Setup

<b>Audio Mode</b>	STEREO	In the same way as for DUAL MONO, each channel is coded separately, however, if on one channel less or no audio is transmitted, these bits are assigned to the other channel (i.e. bit assignment according to demand).
	JOINT STEREO	comparable to MS stereophony (middle/side signal). It codes the sum of left and right and the difference between left and right; these are coded and transmitted separately (subjectively better quality at lower data rates).
	AUTO	the audio mode of the calling unit is taken over.

**Audio Input** The menu item **AUDIO INPUT** serves for setting the desired audio input, when calls are coming in. You can select between:

Analog  
AES/EBU  
S/PDIF

**User Data** The menu item **USER DATA** serves for setting the desired ancillary data, when calls are coming in. You can select between:

OFF (no ancillary data are transmitted)  
1200, 2400, 4800 baud in Layer 2  
1200, 2400, 4800, 9600 baud in Layer 3

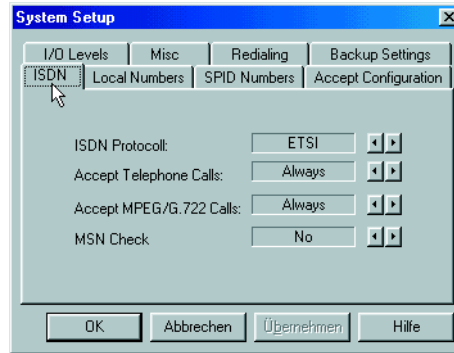
**Please note** If the transmission of ancillary data is switched off (OFF), the alarm control signals are not transmitted either.

From MusicTAXI to MusicTAXI, the lowest preset baud rate of the ancillary data is agreed within the unit handshake.

Press OK (left mouse click) to take over the presetting of the call acceptance. Press CANCEL and the presetting is not taken over.



## ISDN CONFIGURATION



### ISDN Protocol

The MusicTAXI has 12 different ISDN D-channel protocols. Please make sure that you have selected the correct protocol. Decisive is the ISDN protocol of your connection, not the one of the partner unit! Alter the settings by pressing the LEFT and RIGHT buttons.

### Accept Telephone Calls

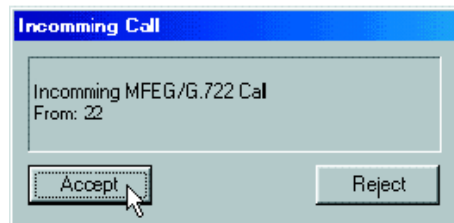
This menu item serves for defining the MusicTAXI behavior when operated at a  $S_0$  connection together with other units. You can select between:

ALWAYS	every telephone call is accepted
NEVER	every telephone call is rejected
ASK	the acceptance of a telephone call has to be confirmed

### Accept MPEG/G.722 Calls

In this menu item the call acceptance for MPEG and G.722 calls is defined. The settings are the same as the above menu item (ACCEPT TELEPHONE CALLS).

With ASK the call is only accepted after confirmation. The following is displayed:



## MSN Check

In the case of a passive call, the interrogation of the MSN number can be activated or switched off. If YES is entered for MSN check, the called number is compared to the one, which had been entered in LOCAL NUMBERS. The call is only accepted, if both numbers are identical. Due to this, various units can be operated at one ISDN connection.

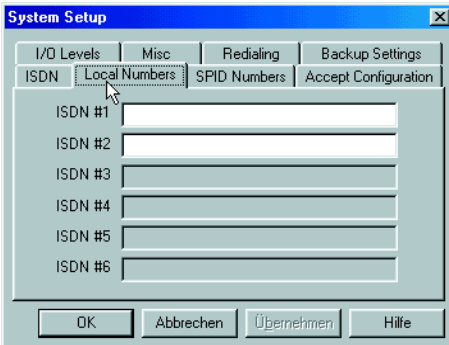
In case of EURO ISDN, the MSN is usually the ISDN number of your connection without the area code, in case of private exchanges the number of your extension.

Only activate this function (YES), if you operate other units (e.g. a telephone, telefax or PC card) at the same ISDN connection in addition to the MusicTAXI.

### Attention

The incorrect configuration of only one unit might result in the rejection of all calls.

## LOCAL NUMBERS



The screenshot shows a 'System Setup' dialog box with the 'Local Numbers' tab selected. The dialog has a title bar with a close button (X). Below the title bar are several tabs: 'I/O Levels', 'Misc', 'Redialing', 'Backup Settings', 'ISDN', 'Local Numbers', 'SPID Numbers', and 'Accept Configuration'. The 'Local Numbers' tab is active, showing six input fields labeled 'ISDN #1' through 'ISDN #6'. A mouse cursor is pointing at the 'Local Numbers' tab. At the bottom of the dialog are four buttons: 'OK', 'Abbrechen', 'Übernehmen', and 'Hilfe'.

(available only for units with ISDN)

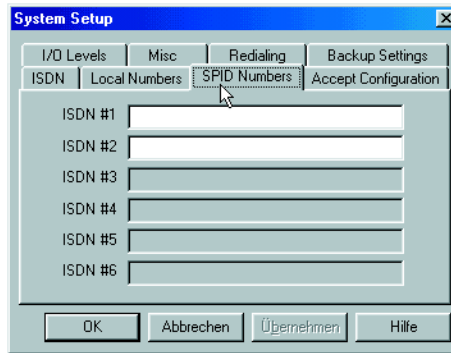
Using LOCAL NUMBERS and MSN Check, different units can be operated on one ISDN line.

The ISDN numbers, which are entered here, are sent when the connection is established; not necessary if the unit is operated at a  $S_0$  connection, however, useful when operated at a private exchange.

With the right mouse button click onto the ISDN input field and enter the desired telephone number. To change to another field, you can either use the tab key or click onto your desired field.

Confirm with OK.

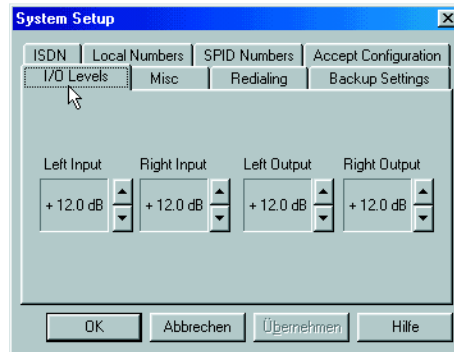
## SPID NUMBERS



(available only for units with ISDN)

The SPID numbers, you enter here, are also sent when the connection is established. This is only necessary when operated on US or Canadian networks.

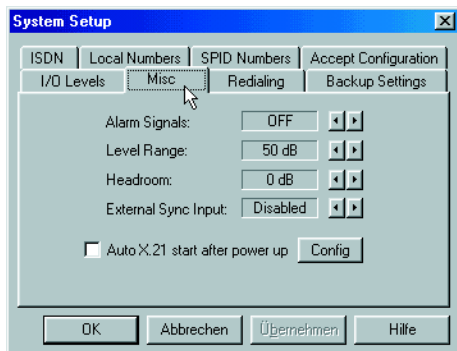
## I/O LEVELS



This menu item serves for setting the analog INPUT- and OUTPUT-level for the left and right channel. Ex factory the setting is +12 dBu, the headroom is 0 dB. This means: input level = output level = 12 dBu. With a mouse click on the UP and DOWN buttons the level value can be altered.

Confirm with OK.

## MISC



### Alarm Signals

If the signals are switched OFF; the ALARM CONTROL INTERFACE behaves as described on page 12. Otherwise you can select between:

- CON The signal is set at pin 19, as soon as the decoder is synchronized - i.e. when the connection is OK.
- DIS The signal is set at pin 18, if the line had been disconnected from the partner unit or due to an ISDN failure.
- CON+DIS Both signals are set.
- BACKUP (pls. see BACKUP SETTINGS)

Confirm with OK.

### Level Range

This menu item allows the adjustment at the level range: 50 or 80 dB.

### Headroom

This menu item serves for setting the desired headroom. You can select between 0 and 20 dB in 1 dB steps. Ex factory the setting is 0 dB. The scale display in the online menu is moved.

**Attention** Clipping limit at 0 dB + selected headroom!

### External Sync Input

The MusicTAXI has a sample rate converter at the audio INPUT and OUTPUT. For the external synchronization of the digital output you can select between:

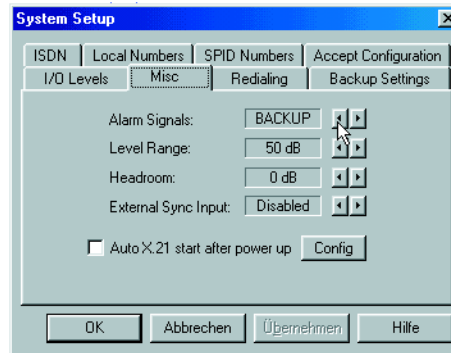
- DISABLED Word clock is generated from the ISDN transmission clock
- DIGITAL IN Word clock is generated from the AES/SPDIF input signal
- SYNC IN Word clock is taken over from the SYNC IN

## Automatic X.21 Start

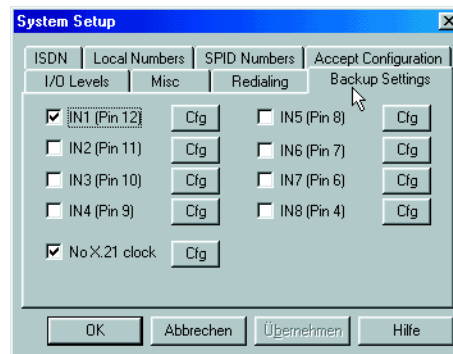
After switching on when 'Auto X.21 after power up' is activated, the unit starts automatically in the X.21 mode. Adjust the configuration with the 'Cfg' button

## BACKUP Settings

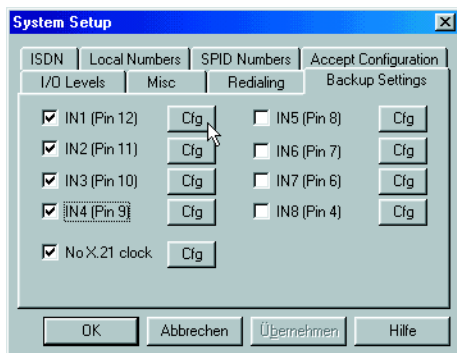
This function is only available, if the mode BACKUP in ALARM SIGNALS is chosen.



In the BACKUP SETTING mode you can delegate to every input port of the ALARM/CONTROL INTERFACE an entry of the ISDN directory.



To do this, you must select the requested input port. Press the 'Cfg' button to allocate an ISDN number to this input port. This ISDN number complies in all parameters to the respective entry in the ISDN directory.



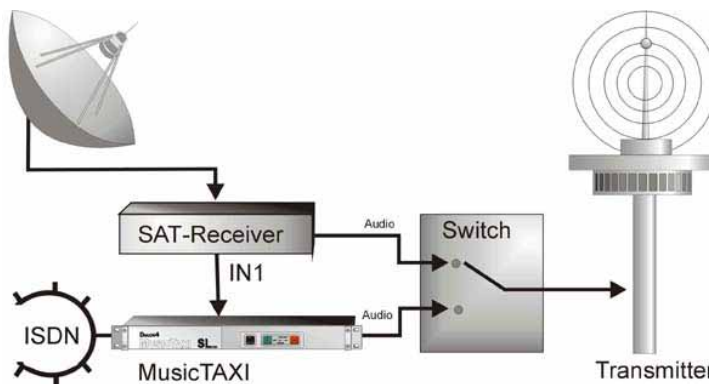
In the following example the alarm/control ports IN1 to IN4 are used for the backup.

The ports IN5 to IN8 are configured with 00 and can be used for transparent switching informations.

The confirming signal, as soon as the ISDN line is established or the switching information is done, is indicated on the relating outputs of the ALARM/CONTROL INTERFACE. By using IN2 for establishing a connection, OUT2 will confirm the connection when the decoder sync is OK.

## Examples of Applications by Using BACKUP Settings

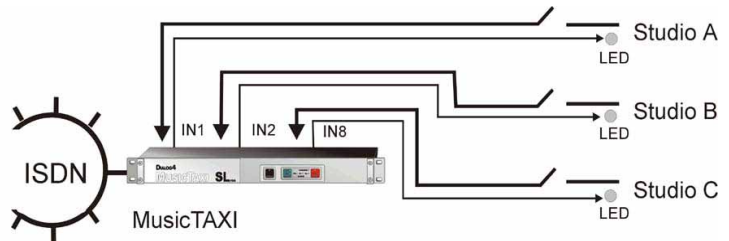
### SATELLITE - ISDN REDUNDANCY



Assuming the satellite receiver can indicate an opto-decoupled error message, you can connect this information to the alarm/control interface. If the error message is ON, the MusicTAXI will automatically establish an ISDN connection to the relevant entry number. If the error message signal is OFF, the MusicTAXI will disconnect an existing ISDN connection.

## Panic Dial

Up to 8 individually configured connection partners can be called by using switches. As soon as the ISDN connection is established and the decoder is in SYNC, you can indicate this by using a LED connected to the corresponding OUTPUT of the alarm/control interface.



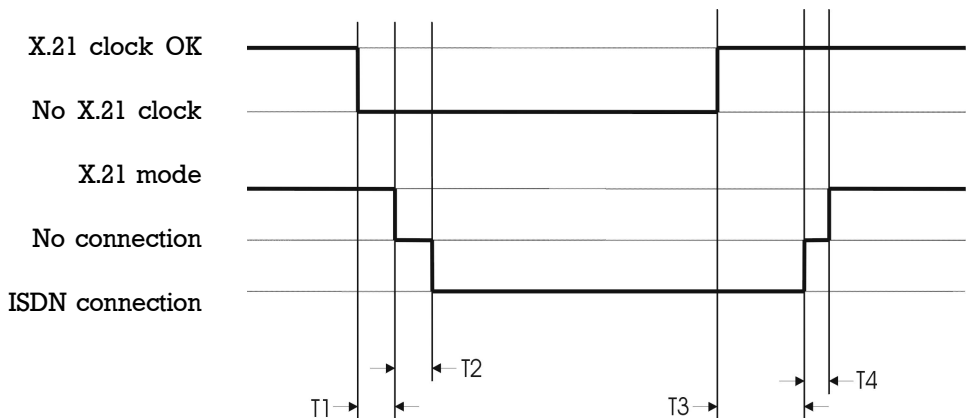
If the switch is opened, the ISDN connection will be disconnected.

## X.21 Clock Monitoring

An additional new feature is the monitoring of the X21 clock. To do this the idem 'No x.21 clock' must be activated. Enter with the corresponding Cfg button in the ISDN number of the partner unit which should be dialed in case of error. The desired configuration is also entered.

When the unit is in the X.21 mode and the X.21 clock fails, the unit returns to the main menu, the ISDN connection is then established.

As soon as the X.21 clock is active again, the ISDN connection is disconnected and the unit returns to the X.21 mode.



T1: Time, how long the X.21 mode must fail before the ISDN connection is established.

# Getting Started

## System Setup

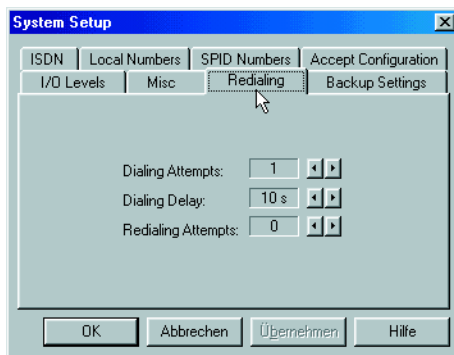
- T2: Length of time for ISDN connection to be established.  
T3: Time, how long the X.21 clock must again be active before the ISDN connection is again disconnected.  
T4: Length of time for ISDN connection and change into X.21 mode.

Times:	T1	T2	T3	T4
	2 sec.	5-30 sec.	5 sec.	1-2 sec.

When using MT Remote with a VP-PRO, please observe the following:

Backup IN1 replaces entry	87 in the no. list.
Backup IN2	88
Backup IN3	89
Backup IN4	90
Backup IN5	91
Backup IN6	92
Backup IN7	93
Backup IN8	94
No X.21 clock	95
X.21 autostart	96

### REDIALING



(available only for units with ISDN)

#### Dialing Attempts

This menu item serves for setting the desired dialing attempts. You can select between 1 and 5.

#### Dialing Delay

This menu item serves for setting the desired time between the dialing attempts. You can select between 10 ... 60 seconds.

#### Redialing Attempts

This menu item serves for setting the desired redialing attempts, if a connection had not been disconnected by the calling MusicTAXI. You can select between 0 and 5. Confirm with OK.

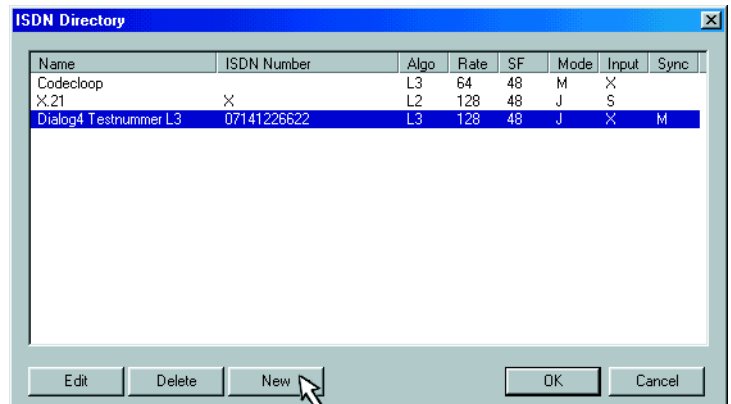


### Main Menu DATA INPUT

Select DATA INPUT from the MAIN MENU.



The Directory for ISDN number, name and audio parameters appears:

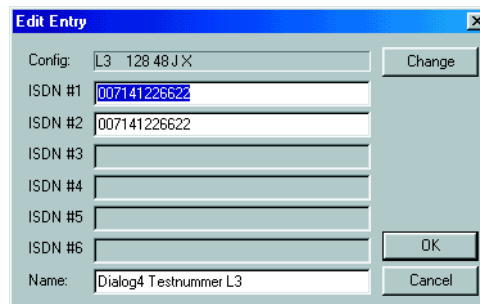


#### Attention

The field sizes are variable and can be altered with the mouse.

### Enter New Recipient

With the left mouse button click onto the function NEW. The input mask for the ISDN number, name and audio configuration appears.



Depending on the number of ISDN modules, the possible input fields are displayed white. Click onto the field to

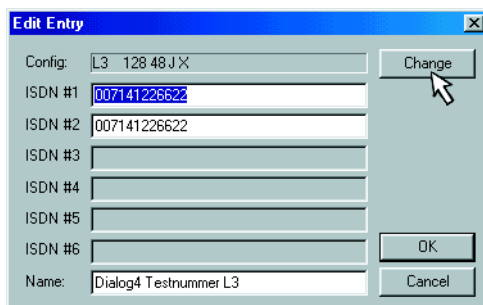
## Getting Started Data Input

activate the entry. The positioning marker of the cursor flashes, when you can start to enter the number. Change over to other ISDN input field by pressing the tab key.

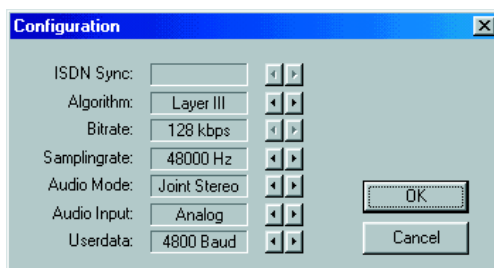
As soon as the ISDN numbers have been entered, you can assign a name to the recipient with as many letters as you like.

### Edit Recipient

Click with the left mouse button onto the recipient which you would like to edit. The entry is displayed invertedly.



To alter the presetted audio configuration, press CHANGE.

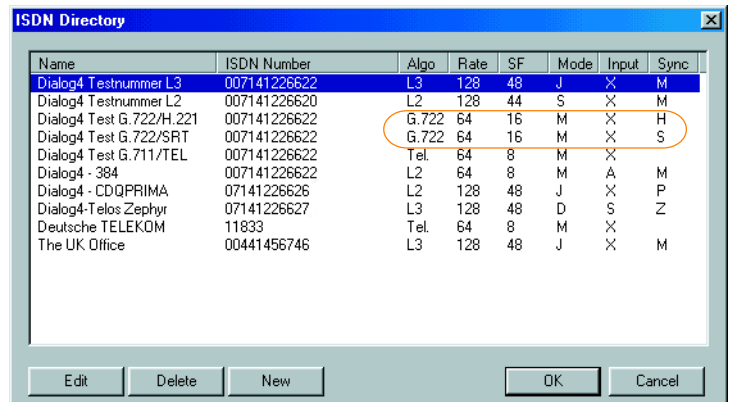
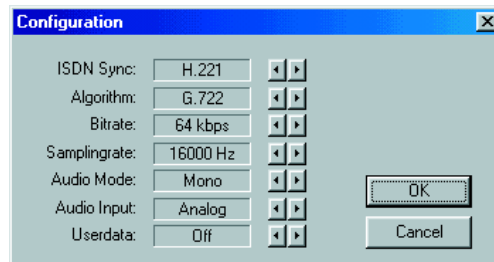


The configuration menu appears with the audio parameters, which are assigned to the present entry. By moving the arrows (left-right) you can alter the entries, similar to the ACCEPT CONFIGURATION (pls. see page 17). Confirm with OK. The recipient is included in the ISDN directory. The AUTO mode is now available to the ISDN Sync.

### G.722 with H.221 or SRT SYNC

If you enter a G.722 partner in the DATA INPUT menu, please observe the following order:

1. Enter the ISDN number.
2. Enter G.722 in ALGORITHM
3. Determine the SYNC modes in ISDN SYNC.



Press OK to leave the menu. Now H = H.221 or S = SRT is displayed in the directory for the selected SYNChronisation procedure.

### X.21 Mode

To activate the X.21 interface, enter a X in field ISDN #1.

### CODEC LOOP

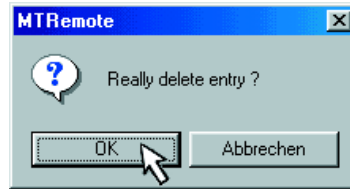
If the input field ISDN#1 is empty, the MusicTAXI starts the CODEC LOOP. This serves as test for the coded audio signal (without ISDN).

# Getting Started

## Data Input

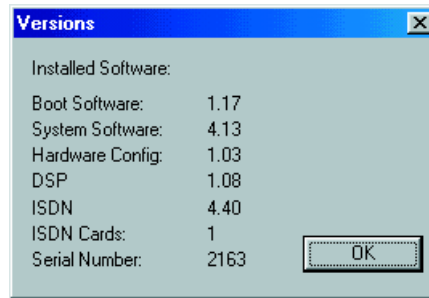
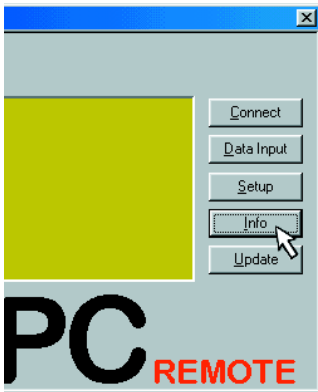
### Delete Recipient

Click with the left mouse button onto the entry in the ISDN directory which you would like to delete. The entry is displayed invertedly. Deletion takes place after confirming with the OK button.



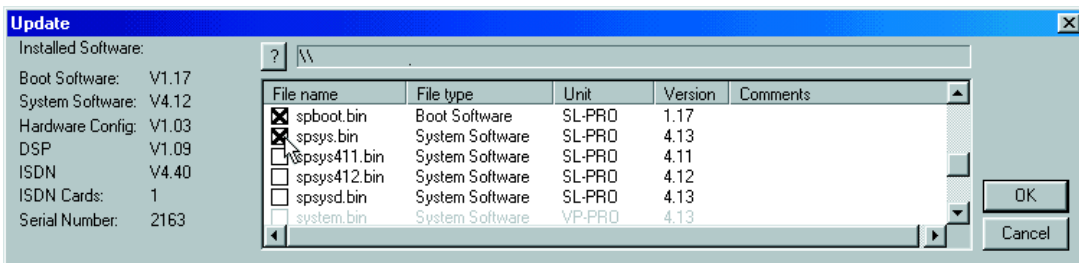
### INFO

The info function serves for checking the present software version of the connected MusicTAXI. All software parts including versions are displayed. You can also interrogate the serial number of your MusicTAXI.



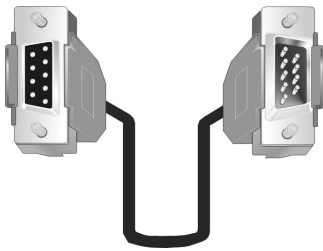
### UPDATE

Contrary to the info function, not only the present software version is interrogated and displayed, but also the latest software versions (downloaded from the internet server, etc.) stored in the respective directory of the PC. You can now decide which software parts you would like to update in the MusicTAXI. Select the version with the left mouse button and confirm the update function with OK.



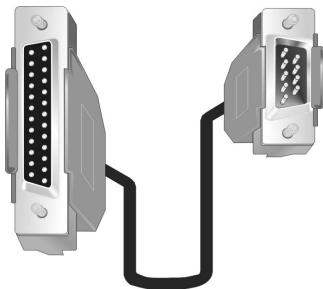
## Serial Cable (KB003) to PC

The MusicTAXI is connected to your PC using the delivered serial 9-pole or a 25-pole cable (male/female).



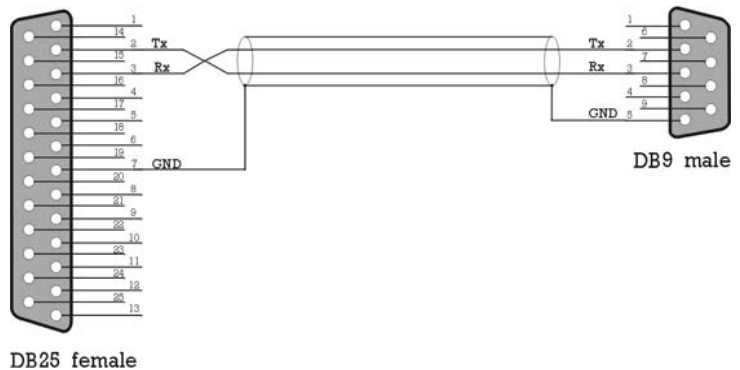
PC connection

MusicTAXI connection



PC connection

MusicTAXI connection



### Attention

For RS232 internal signals are assigned to pins 2, 3 and 5, for RS422 to pins 1, 4, 5, 6 and 9!

**A fully assigned 1:1 cable to the PC might result in the damage of the PC and/or MusicTAXI!**

Please use only cables as described above.

## System Requirements

Windows 3.x/95/98/NT  
a free serial interface (COM1 ...COM4).

### Note

Nearly all function components are software-based and stored in Flash EPROMs. The latest software updates, manuals and technical information can be downloaded from our internet server:

<http://www.dialog4.com>

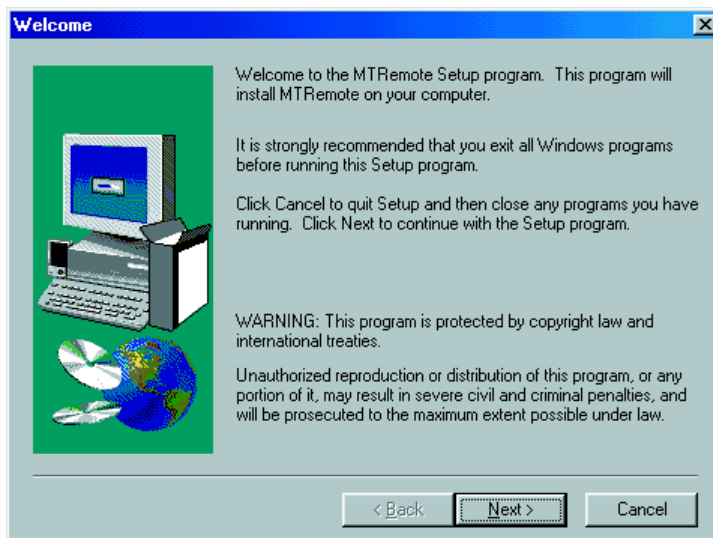
You can, of course, request information and updates from DIALOG4 on disk.

# Getting Started

## Software Installation

### MT Remote Software Installation

1. Start the setup program.
2. Follow the installation instructions on the PC monitor.
3. The MTRemote software will be installed on your PC.



After the initial start of the MusicTAXI remote control software (with double click on the application icon) during the initialising the unit configuration and type of unit is requested and displayed. There is a display of for e.g. the following information:



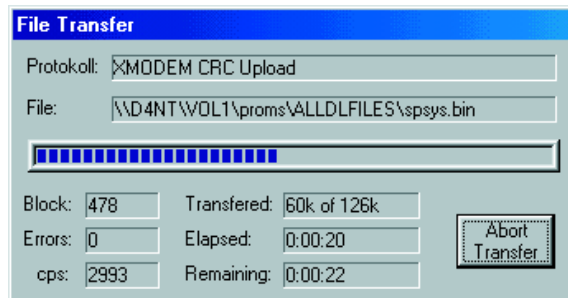
Consequently the main menu appears in standby mode.

## Software Update



As described on the page 30, you can decide which software parts you want to update in the MusicTAXI (system, DSP, or boot software and hardware configuration) Select the new version with the left mouse button and confirm the update function with the OK button.

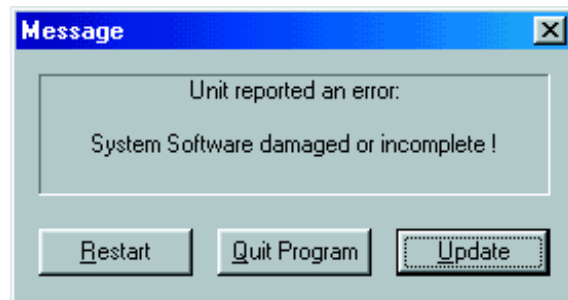
## Dialogbox by Update



A dialogbox accompanies you throughout the update and informs you about the current process.

## Attention

Do not switch off your PC or MusicTAXI during the update process. After an unsuccessful update, an error message is displayed.



## **SL-PRO Update Interrupted**

If the software update was interrupted, e.g. due to user or computer error, please observe the following:

Switch the unit OFF and ON again. In most cases the unit displays an error message about that part of the software which had not been loaded completely and a reload is requested.

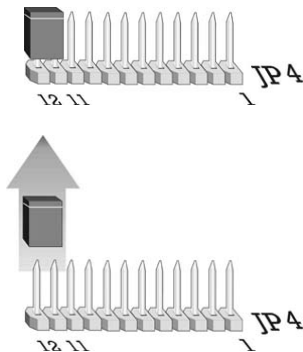
## **DSP Software**

In the case of the DSP software an error message might not be displayed after switching the unit on and the main menu is displayed. The error message is only shown after another algorithm has been selected, e.g. G.711.

## **System Software**

If the software is damaged or not completely loaded, an error message is always displayed.

## **Hardware Configuration**



An interruption during the update of the hardware configuration might have the effect that the unit cannot be started again, the display is blank. In this case the unit has to be opened and a jumper has to be set.

Connect the pins 11 and 12 on JP4 with a jumper. When the unit is switched on again, a boot menu is shown. In this setting every file can be re-loaded with the external download software.

### **Attention**

The jumper has to be removed after the download!

## **Boot Software**

The update of the boot software is realized in two phases. In the first phase the software is downloaded from the PC to the unit. If the update is interrupted during the first phase, the unit only has to be started again.

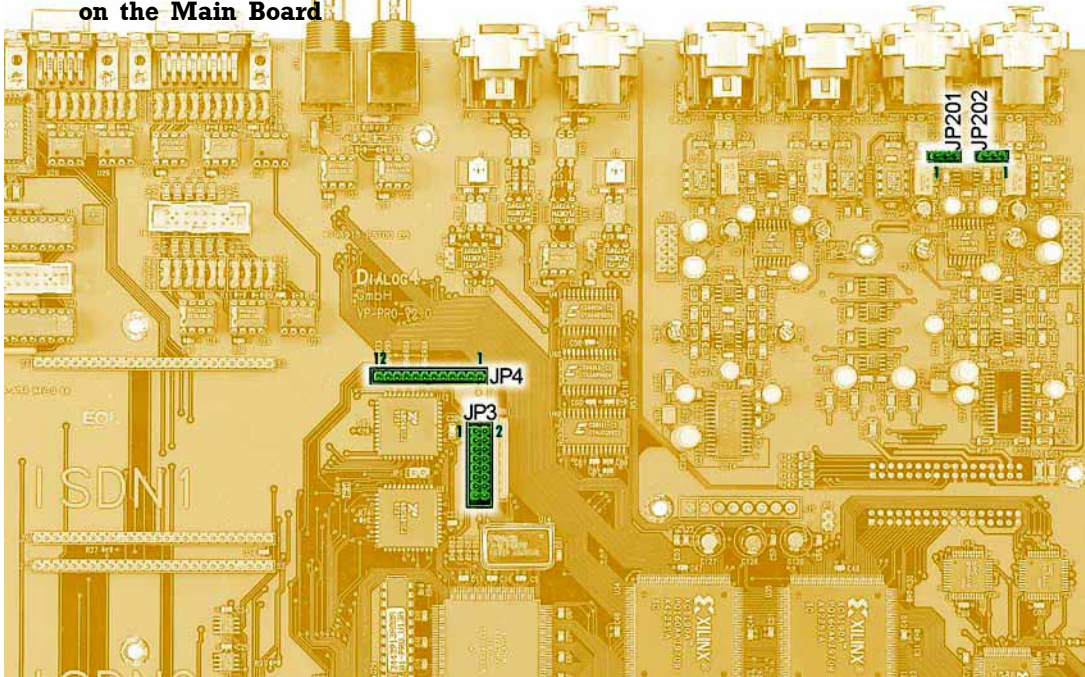
The software is programmed into the unit during the second phase. This takes about 5 seconds. This process can only be interrupted by switching the unit off or by a power supply failure. After this interruption the unit cannot be started again, not even by the above described emergency start. It can only be reloaded by DIALOG4.



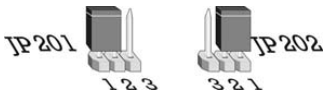
## Important Jumper Settings on the Main Board

### Attention

Unplug power supply cable before opening the unit!



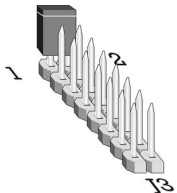
### Input Impedance



Switch over of the input impedance ANALOG INPUT (pls. see page 9)

- Jumper JP 201/202 1 - 2 set: 600 ohms
- 2 - 3 set:  $\geq 10$  kohms

### Switch over RS232/RS422

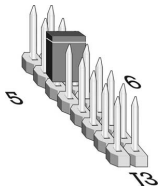


Switch over from RS232 to RS422 (pls. see page 11)

- Jumper J3 1 - 2 set: REMOTE-Port operates in RS422
- 1 - 2 open: REMOTE-Port operates in RS232

### X.21 Operation

(only for units without ISDN module)



Jumper J3 5 - 6 set: units operates in X.21 mode only

# Connection Establishment

## Connect

### Main Menu CONNECT

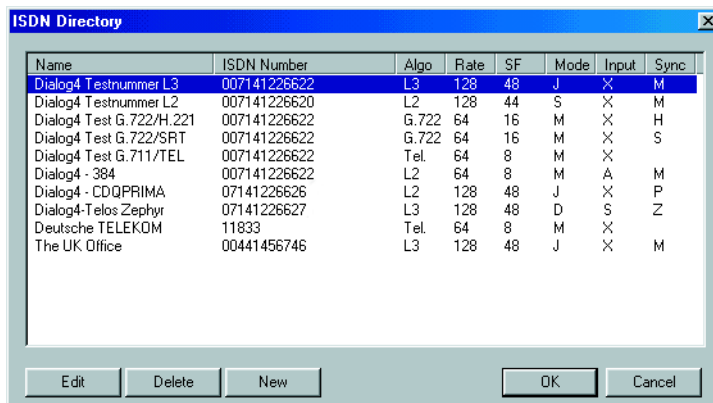
The respective ISDN connection can be established quickly and easily because the built-in telephone directory permits 96 entries, each of which can be individually configured. For establishing the connection you can choose between dialing via telephone directory, abbreviated entry and entry number or manual input using the numeric keypad via a remote panel.



### Establishing a Connection by Using the Telephone Directory

A pre-requisite for the connection establishment is the correct initializing of the MT REMOTE software with the connected MusicTAXI. This is confirmed with the STANDBY display menu (as).

After pressing the CONNECT button, the present telephone directory appears:

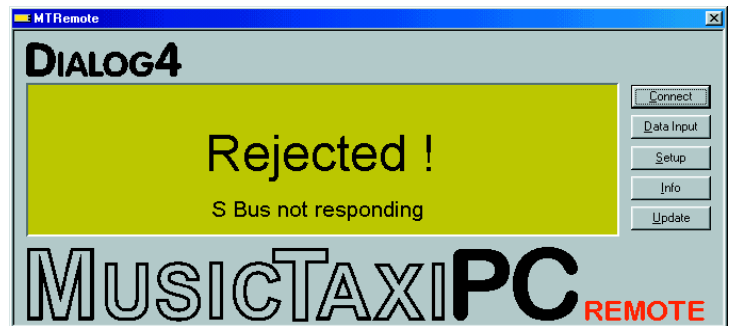


The abbreviated name of your connection partner, the ISDN number, the selected audio parameters as well as the name of the partner codec, which are assigned to each entry, are displayed.

Select your desired partner from the list with the left mouse button. The selected connection partner is displayed invertedly. Confirm the connection establishment with OK.



After successful synchronisation the MusicTAXI displays 'SYNC OK' and moves into the online menu. If the requested connection is rejected the MusicTAXI displays in the STATUS field 'REJ' and describes in the display the reason for the failure. (pages 42-44).



### **X.21 Connection Establishment**

Select an entry with 'X' as the first number of the ISDN number from the telephone directory.

### **CODEC LOOP Connection Establishment**

Select an entry without an ISDN number from the telephone directory. The connection is established either via telephone directory or quick dial (when using a remote panel).

### **Call Acceptance**

If the SL-PRO is called, it automatically adjusts to the audio configuration of the calling codec. It make no difference whether the call is from a cellphone, a telephone booth or from a studio: the MusicTAXI SL-PRO reacts automatically and secures the audio transmission.

## Explanations

### **Call Acceptance with ISDN SYNC AUTO**

The function AUTO (Automatic Detection of the calling Unit) is entered in the SYSTEM SETUP/ACCEPT CONFIGURATION. The function ISDN SYNC AUTO has priority over all other entries. This means, if AUTO is set and the MusicTAXI is called by any competitor's codec (Telos ZEPHYR, CCS CDQPRIMA, GSM telephone, analog telephone, etc.) the MusicTAXI sets itself to the audio parameters incl. SYNC modes of the calling unit automatically. This might last up to 30 seconds.

However, the set parameters of the SYSTEM SETUP/ACCEPT CONFIGURATION are taken over, if the MusicTAXI is called by a MusicTAXI.

### **Connection Establishment with ISDN SYNC AUTO**

When a connection partner is entered into the telephone directory, ISDN SYNC and audio parameters can be preset in the configuration. However, if ISDN SYNC AUTO had been entered, it has priority over all other setting, i.e. if a connection is established to competitor units (Telos ZEPHYR, CCS CDQPRIMA, GSM telephone, analog telephone, etc.) the MusicTAXI sets itself to the audio parameters incl. SYNC modes of the remote unit automatically. This might last up to 30 seconds.

### **Connection Establishment with CODEC LOOP**

In the operation mode CODEC LOOP, the incoming audio signal is coded first and then transmitted via the decoder to the output.

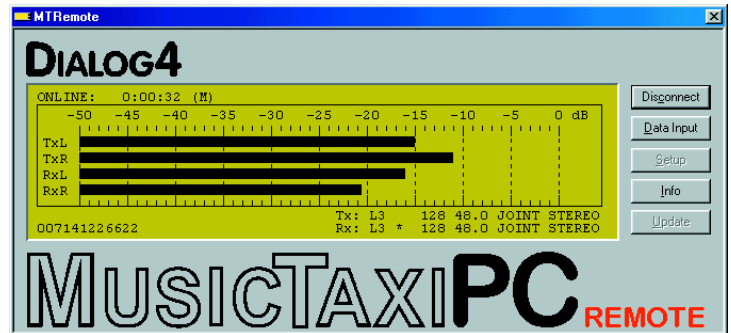
### **X.21 Operation**

In the operation mode X.21, MPEG data is transmitted and received via the X.21 interface. The network clock has to be identical to the bit rate, which had been entered in the configuration menu.

# Connention Monitoring Disconnection

## Connection Monitoring

You can easily monitor your audio transmission. After the connection is established and the audio parameters are exchanged, the on-line transmission menu is displayed. It informs you on the send and receive levels, connection time as well as set headroom and ISDN SYNC. In addition to the send (Tx) and receive configuration (Rx) the ISDN number of your connection partner is displayed.

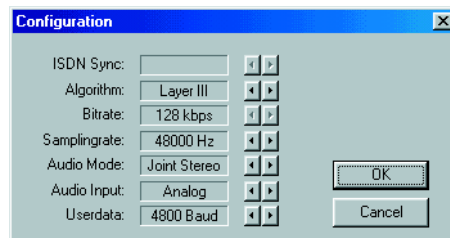


## ✚ SYNC Display

The SYNC display in the Rx path confirms that the decoder of your connection partner receives correct data.

The SYNC display only appears, if the connection is established between MusicTAXIs, not if it is established to competitor's codecs.

If the ENTER key is pressed during a connection, the CONNECT MENU is displayed without line disconnection. It provides the following possibilities:



The BITRATE und ISDN SYNC, however, cannot be modified during ISDN connection.

## Disconnection

An existing connection is ended by pressing the DISCONNECT button. After disconnection the message 'LOCAL DISCONNECT' appears on the display. Your connection partner sees the message 'REMOTE DISCONNECT'.

The MusicTAXI goes into standby mode and waits for further connection requests.

# Audio Compatibility

In order to establish a connection between a MusicTAXI, ZEPHYR and PRIMA the following configurations have to be set:

## LAYER 2 with 64 kbps

MusicTAXI	ZEPHYR	CDQPRIMA
ISDN SYNC: NO SYNC	Compat: ZEPHYR	Encoder: Line FMT: 1LN
ALGORITHM: LAYER 2	Xmt: L2 Mono	Algorithm: MPEG L2
AUDIO MODE: MONO	Rcv: L2	Algo mode: Mono
DATA RATE: 64 kbps	Rate: 64 kbps	Bit rate: 64 or AUTO
DATA CHANNEL: OFF		Decoder: Line FMT: 1LN
		Indep: Yes
		Algorithm: MPEG L2
		Bit rate: 64 or AUTO
		or: Speed dial: Nr. 25

## LAYER 2 with 128 kbps

MusicTAXI	ZEPHYR	CDQPRIMA
ISDN SYNC: PRIMA	Compat: ZEPHYR	Encoder: Line FMT: CCS2 LN
ALGORITHM: LAYER 2	Xmt: L2 M/DM/JS	Algorithm: MPEG L2
AUDIO MODE: MONO/ D. MONO/ STEREO/ J. STEREO	Rcv: L2	Algo mode: M/DM/S/JS
DATA RATE: 128 kbps	Rate: 64 kbps	Bit rate: 128 or AUTO
DATA CHANNEL: OFF		Decoder: Line FMT: CCS2 LN
		Indep: Yes
		Algorithm: MPEG L2
		Bit rate: 128 or AUTO
		or: Speed dial: Nr. 27

## LAYER 3 with 64 kbps

MusicTAXI	ZEPHYR
ISDN SYNC: NO SYNC (INV)	Compat: ZEPHYR
ALGORITHM: LAYER 3	Xmt: L3 Dual
AUDIO MODE: MONO	Rcv: L3 Mono
DATA RATE: 64 kbps	Rate: 64 kbps
DATA CHANNEL: OFF	

## LAYER 3 with 128 kbps

MusicTAXI	ZEPHYR
ISDN SYNC: ZEPHYR	Compat: ZEPHYR
ALGORITHM: LAYER 3	Xmt: L3 Stereo/ Joint Stereo
AUDIO MODE: DM/S/JS	Rcv: L3 Stereo
DATA RATE: 128 kbps	Rate: 64 kbps
DATA CHANNEL: OFF	

## G.722 with 64 kbps

MusicTAXI		ZEPHYR	CDQPRIMA
ISDN SYNC:	SRT	Compat: ZEPHYR	Encoder: Line FMT: ILN
ALGORITHM:	G.722	Xmt: G.722	Algorithm: G.722
AUDIO MODE:	MONO	Rcv: G.722	Algo mode: M1
DATA RATE:	64 kbps	Rate: 64 kbps	Bit rate: 64 kbps
DATA CHANNEL:	OFF		Decoder: Line FMT: ILN
			Algorithm: G.722
			Bit rate: 64 kbps

In Layer 2 and 3 you can only select the sampling rates 32 kHz or 48 kHz. The settings for both units have to be identical.

### Status Messages

In the online menu the following messages can be displayed:

Status Messages	Possible Cause
• NO X.21 CLOCK	No X.21 clock was determined.
• ILLEGAL X.21 CLK	The measured X.21 clock does not correspond to a ISO data rate. The measured clock frequency is displayed.
• NO INPUT SIGNAL	The AES or SPDIF input has been set and there is no signal at the selected input.
• DSP TIMEOUT	On access to the DSPs there is no confirmation message.
• ISDN PIPELINE OVERFLOW	ISDN operation is not possible.
• REMOTE PIPELINE OVERFLOW	The remote port does not respond.

## ISDN Error Codes

Error Codes	Possible Cause	Test Point/Correction
<ul style="list-style-type: none"> <li>• S BUS NOT RESPONDING</li> </ul>	<p>The MusicTAXI could not establish a communication to the ISDN connection:</p> <ul style="list-style-type: none"> <li>• ISDN cable not plugged in</li> <li>• ISDN cable damaged</li> <li>• ISDN connection not in operation</li> <li>• Both B-channels of this connection are already used by another unit.</li> </ul>	<ul style="list-style-type: none"> <li>• Check ISDN cable and connection and try again.</li> </ul>
<ul style="list-style-type: none"> <li>• CHANNEL UNACCEPTABLE</li> <li>• CALL IN AN ESTABLISHED CHANNEL</li> <li>• USER BUSY</li> <li>• NON-SELECTED USER CLEARING</li> <li>• RESPONSE TO STATUS INQUIRY</li> </ul>	<p>The MusicTAXI could not establish a connection to the entered number:</p> <ul style="list-style-type: none"> <li>• Partner has already established a connection (busy)</li> <li>• The ISDN number is wrong.</li> </ul>	<ul style="list-style-type: none"> <li>• Check entered ISDN number and/or try again later.</li> </ul>
<ul style="list-style-type: none"> <li>• UNALLOCATED NUMBER</li> <li>• NO ROUTE TO SPECIFIED NETWORK</li> <li>• NO ROUTE TO DESTINATION</li> <li>• NUMBER CHANGED</li> <li>• DESTINATION OUT OF ORDER</li> <li>• INVALID NUMBER FORMAT</li> <li>• FACILITY REJECTED</li> </ul>	<p>The MusicTAXI could not establish a connection to the entered ISDN number:</p> <ul style="list-style-type: none"> <li>• the ISDN number is wrong and does not exist.</li> </ul>	<ul style="list-style-type: none"> <li>• Check entered ISDN number and/or try again later.</li> </ul>
<ul style="list-style-type: none"> <li>• NORMAL CALL CLEARING</li> <li>• NO USER RESPONDING</li> <li>• NO ANSWER FROM USER</li> <li>• CALL REJECTED</li> <li>• NORMAL, UNSPECIFIED</li> </ul>	<p>The MusicTAXI could not establish a connection to the entered ISDN number:</p> <ul style="list-style-type: none"> <li>• The ISDN number is wrong or does not exist</li> <li>• The called unit is not switched on or connected.</li> </ul>	<ul style="list-style-type: none"> <li>• Check ISDN number and try again later.</li> <li>• Check status of the partner unit and, if necessary, correct it.</li> </ul>



Error Codes	Possible Cause	Test Point/Correction
<ul style="list-style-type: none"> <li>• NO CHANNEL AVAILABLE</li> <li>• NETWORK OUT OF ORDER</li> <li>• TEMPORARY FAILURE</li> <li>• SWITCHING EQUIPMENT CONGESTION</li> <li>• ACCESS INFORMATION DISCARDED</li> <li>• CHANNEL NOT AVAILABLE</li> <li>• RESOURCES UNAVAILABLE</li> </ul>	<p>The ISDN network causes these error codes, i.e. the connection cannot be established due to the ISDN net. Possible causes could be:</p> <ul style="list-style-type: none"> <li>• No B-channel available, all channels used by another unit at the moment</li> <li>• ISDN net overloaded.</li> </ul>	<ul style="list-style-type: none"> <li>• Try again later</li> </ul>
<ul style="list-style-type: none"> <li>• INTER. NETWORKING, UNSPECIFIED</li> </ul>	<p>The cause for this error code is the change over between different ISDN nets of different providers, e.g. from a private one to the Telecom or foreign connections.</p>	<ul style="list-style-type: none"> <li>• Try again later</li> </ul>
<ul style="list-style-type: none"> <li>• INTERNAL TIMEOUT</li> </ul>	<p>During the connection establishment a time out occurred.</p>	<ul style="list-style-type: none"> <li>• Check ISDN number and protocol and try again later.</li> </ul>
<ul style="list-style-type: none"> <li>• QUALITY OF SERVICE UNAVAILABLE</li> <li>• REQUESTED FACILITY NOT SUBSCRIBED</li> <li>• BEARER CAPABILITY NOT AUTHORIZED</li> <li>• BEARER CAPABILITY NOT AVAILABLE</li> <li>• SERVICE OR OPTION NOT AVAILABLE</li> <li>• BEARER CAPABILITY NOT IMPLEMENTED</li> <li>• CHANNEL TYPE NOT IMPLEMENTED</li> <li>• REQUESTED FACILITY NOT IMPLEMENTED</li> <li>• ONLY RESTRICTED DIG. INFO AVAILABLE</li> <li>• SERVICE OR OPTION NOT IMPLEMENTED</li> </ul>	<p>The cause for this error code is that one function is not supported by the ISDN net, which the MusicTAXI, however, needs. Further call attempts will result in the same error code.</p> <ul style="list-style-type: none"> <li>• Set ISDN protocol is wrong</li> </ul>	<ul style="list-style-type: none"> <li>• Check ISDN protocol. If the protocol is correct, establish a test connection in the telephone mode to check the cleared services. If the connection can be established, the service 'Data transfer' is not cleared for the ISDN connection of the calling MusicTAXI. The service has to be cleared by the provider.</li> </ul>

## ISDN Error Codes

Error Codes	Possible Cause	Test Point/Correction
<ul style="list-style-type: none"> <li>• INVALID CALL REFERENCE VALUE</li> <li>• IDENTIFIED CHANNEL DOES NOT EXIST</li> <li>• CALL IDENTITY IN USE</li> <li>• INCOMPATIBLE DESTINATION</li> <li>• DEST. ADDRESS MISSING/ INCOMPLETE</li> <li>• INVALID TRANSIT NETWORK SELECTION</li> <li>• INVALID MESSAGE, UNSPECIFIED</li> <li>• MANDATORY ELEMENT MISSING</li> <li>• MESSAGE TYPE NOT IMPLEMENTED</li> <li>• ILLEGAL MESSAGE</li> <li>• INFORM. ELEMENT NOT IMPLEMENTED</li> <li>• INVALID INFORMATION ELEMENT</li> <li>• MESSAGE INCOMPATIBLE TO CALL STATE</li> <li>• RECOVERY ON TIMER EXPIRY</li> <li>• PROTOCOL ERROR, UNSPECIFIED</li> </ul>	<p>Generally a wrongly set ISDN protocol is the cause for the error code.</p>	<ul style="list-style-type: none"> <li>• Check set ISDN protocol and try again.</li> </ul>
<p>• " --- "</p> <p><b>ONLY BY US-PROTOCOLS</b></p>	<p>There is no error code from the ISDN net. It could be that the B-channel was disconnected by the MusicTAXI itself or the partner unit.</p>	<ul style="list-style-type: none"> <li>• Check entered ISDN number and try again.</li> </ul>
<ul style="list-style-type: none"> <li>• SPID REQUEST PENDING</li> </ul>	<p>The request for the SPID numbers has not yet been answered.</p>	<ul style="list-style-type: none"> <li>• Check SPID number and connection.</li> </ul>
<ul style="list-style-type: none"> <li>• SPID FAILED</li> <li>• ILLEGAL SPID</li> </ul>	<p>SPID was rejected by the ISDN.</p> <p>The entered SPID number is too short.</p>	<ul style="list-style-type: none"> <li>• Check SPID number and try again.</li> </ul>
<ul style="list-style-type: none"> <li>• SPID MISSING</li> </ul>	<p>An US protocol has been selected, however, no SPID number entered.</p>	<ul style="list-style-type: none"> <li>• Enter SPID number and try again.</li> </ul>

<b>MusicTAXI SL-PRO</b>	Size: 19", 1U, depth: 380 mm, temper.: -10 °C ... +45 °C, no fan necessary, relative humidity: 30 ... 90 %, Line voltage: 100 ... 240 V AC, 50/60 Hz, 0.18 ... 0.10 A, max. 25 VA, weight approx. 4,5 kg.
<b>Algorithms</b>	ISO/MPEG 11172-3 Layer 2 (Musicam), ISO/MPEG 11172-3 Layer 3, G.722 with H.221 and SRT, G.711.
<b>Audio Modes</b>	Mono, Dual Mono, Stereo, Joint Stereo.
<b>Transmission Rates</b>	ISDN: n x 64 kbps (n= 1 ... 6), X.21: 8 ... 384 kbps
<b>Sampling Frequencies</b>	16, 22.05, 24, 32, 44.1, 48 kHz.
<b>Ancillary Data</b>	0, 1200 - 9600 baud.
<b>PC Remote Control</b>	RS232/RS422 with 9600 baud, all functions can be operated remotely. Software download
<b>X.21 Interface</b>	Rx and Tx for 8 to 384 kbps
<b>SYNC Modes</b>	Bonding for MusicTAXI, channel splitting with 2 ISDN B-channels for Zephyr, CCS Sync with 2 ISDN B-channels for CDQPRIMA and CDQ2000, G.722/H.221 for AVT 7 kHz telephone, G.722/SRT for 7 kHz Glensound and 7 kHz CCS and 7 kHz Zephyr, J.52 (in progress).
<b>Audio Interfaces</b>	<b>Digital:</b> AES/EBU according to IEC 958 professional format, S/PDIF according to IEC 958 consumer format, external clocking, sample rate converter at input and output. <b>Analog input:</b> 18 bit, adjustable level range from -4 to +21 dBu, impedance $\geq 10$ kohms / 600 ohms, asymmetric attenuation (CMR) $\geq 66$ dB <b>Analog output:</b> 0 bit, adjustable level range from -4 to +21 dBu, impedance $\leq 50$ ohms, asymmetric voltage attenuation $\geq 40$ dB according to IEC 268-2.
<b>Frequency Response</b>	20 Hz - 20 kHz, +0.5/-1 dB.
<b>Signal to Noise Ratio</b>	weighted: $\geq 80$ dB, unweighted: $\geq 85$ dB.
<b>Distortion (THD+N)</b>	(with a 20 kHz Filter, to 5 kHz) at maximum level $\leq 0.06\%$
<b>Crosstalk Attenuation</b>	(ratio) at 1 kHz $> 100$ dB.
<b>Phase Error</b>	$\leq 1,5$ degrees.
<b>MusicTAXI PC Remote</b>	System requirements: Windows 95/98/NT, 16 MB of RAM.

All technical alternations may be subject to change without notice.

**Scope of Delivery**

MusicTAXI SL-PRO  
 Power supply cable, length: 2 m  
 ISDN cable; length: 2 m  
 Serial 9-pole cable KB003, length: 5 m  
 MT PC Remote control software, 1 disk  
 Manual for MusicTAXI SL-PRO

**Versions**

Order No	Model	Description
9 200 000	SL-PRO X.21	Full duplex audio codec with X.21
9 200 001	SL-PRO 128	Full duplex audio codec with 1 x S <sub>0</sub>
9 200 002	SL-PRO 256	Full duplex audio codec with 2 x S <sub>0</sub>
9 200 003	SL-PRO 384	Full duplex audio codec with 3 x S <sub>0</sub>
7 000 131	MIDAS 1	ISDN extension for 1 <sup>st</sup> S <sub>0</sub> connection
7 000 132	MIDAS 2	ISDN extension for 2 <sup>nd</sup> S <sub>0</sub> connection
7 000 133	MIDAS 3	ISDN extension for 3 <sup>rd</sup> S <sub>0</sub> connection

The ISDN extensions are delivered with a complete cable set and work plug&play without additional software modifications.

**Optional Accessories**

MusicTAXI PAN-PRO (PAN-PRO is an external desktop unit which can handle a distance to the MusicTAXI of up to 500 meters. The graphical display shows peak meters, telephone directory, configuration of MusicTAXI, etc. and offers together with the numeric keypad similar control as the MusicTAXI VP-PRO).

**Guarantee**

Unless otherwise stipulated, standard guarantee regulations are valid and applicable. Damages resulting from changes or improper repairs by the orderer or a third party are not covered by the guarantee.

**MusicTAXI Test Number**

Call the DIALOG4 test number +49 7141 22 66 22.  
 Audio is permanently connected.

**Maintenance and Hotline**

The MusicTAXI SL-PRO has no user-serviceable parts. In the case of possible technical problems, please contact our hotline:

DIALOG4 Hotline: 0180-5257428  
 CET: 9:00 to 18:00 hours

# DIALOG4