

## Product information Call Manager tiptel 355 ISDN

The Call Manager tiptel 355 ISDN use only functions which are defined in the EURO-ISDN protocol DSS1. These are just a few basic functions which are listed at the end of this document.

We recommend the connection of the tiptel 350 / 350-10 ISDN between the ISDN NT and the PBX for systems on point-to-multipoint line. All functions are available without restrictions. This operating mode should work on all ISDN lines and with all PBXs which work correctly on central offices of Deutsche Telekom or structurally identical central offices of other operators.

The operation on an internal ISDN S-bus of a PBX is possible as well, if this ISDN port supports several basic features of the EURO-ISDN protocol DSS1. The possibilities of two-way conversation recording and call pick-up must be provided by the PBX and is therefore not necessarily possible in this operation mode.

**The operation on the internal S-bus of the following PBXs have been successfully tested:**

Manufacturer	PBX models
TIPTTEL	tiptel 411 clip, tiptel 811 clip, tiptel 822 clip
TIPTTEL	tiptel 4011 XT, tiptel 30xx - family
AGFEO	AS 40 (transfer of external calls to external targets not possible, protocol not supported by AS 40)
Auerswald	Compact 2204 / 2206 / 4410 USB / 4406 DSL, Commander Basic, ETS-2204I / ETS 4308I
DeTeWe	OpenCom 100 (family)
ELMEG	C88m
EURACOM	E2440 / -19, 141 F, 181 F, 182 F
Lucent T.	EuroGénéris version 710
MATRA	Matracom MC6500 (family)
SIEMENS	Hicom 150 / 300, activation of features (MSN, TEI, ECT) necessary for the internal ISDN S-busses

**Furthermore other PBXs (which have not been tested yet) could work together with the Call Manager tiptel 355 ISDN, if the PBX complies with the following requirements:**

Feature	EURO-ISDN feature	How to test this feature
Answering calls in the operation modes "Voice Mail System", "Answering machine" and "Information system"	Support of 10 MSN	Check the possible configuration of the PBX. If less than 10 MSN are available the tiptel 355 ISDN can be used only with the corresponding number of voicemail boxes.
as above	Support of 4 ISDN devices on one internal ISDN interface  Technical note: The tiptel 355 ISDN needs 4 TEI for double proceeding of the functions.	Connect 4 ISDN telephones to the internal ISDN interface. If possible use telephones with own power supply adaptor because PBXs possibly supplies less power than an NT. This is irrelevant for the operation of the tiptel 355 ISDN as this unit work on a not powered ISDN interface as well.
Call Management (Transfer of calls)  Note: The call transfer is basically done without prior coversation to the target telephone. Busy extensions are detected. If re-corded, the tiptel 355 ISDN will play back a busy announcement.	1) Call transfer when the target extension is ringing:  - ECT during ALERT-state of the target extension or - ICT (Double-DISCONNECT) during ALERT-state of the target extension  2) Call transfer when the target extension answers the call:  - ECT at CONNECT of the target extension or - ICT (Double-DISCONNECT) at CON-NECT of the target extension	Connect a telephone which supports ECT or ICT to the internal ISDN interface of the PBX. Answer an external call and transfer this call 1) to another extension. 2) to another external telephone.  Replace the handset when the target is called (ringing tone, transfer type 1) resp. the target answers the call (type 2). Answer the call with the target telephone.  If this is also possible simultaneously with two transferring telephones connected to the same ISDN port the call transfer with the tiptel 355 ISDN should work as well.

Please note: Do not use (ISDN-) system telephones of the manufacturer. Even if all tests are satisfactory it could happen that the tiptel 355 ISDN do not work correctly, if other essential protocol elements of the EURO-ISDN protocol DSS1 are not supported by the PBX. Where necessary please ask the manufacturer of the PBX to confirm that the above listed EURO ISDN features are supported. To our knowledge there are several larger PBXs which do not support this features.