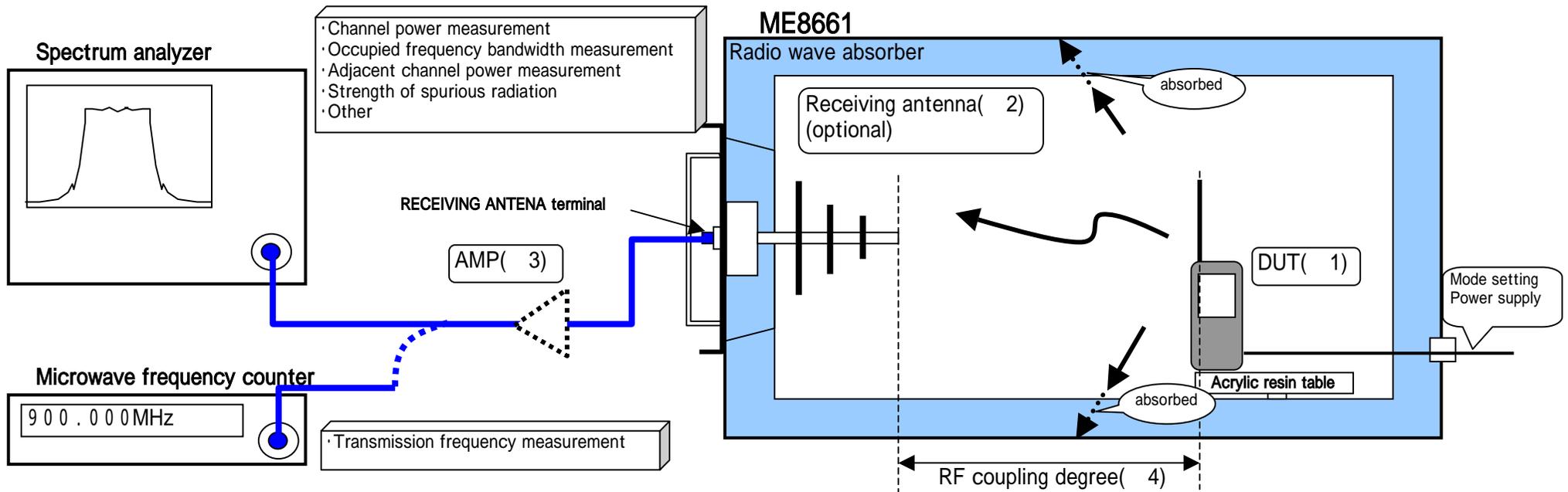


ME8661 / ME8662 : Shielding box (electromagnetic anechoic box) Application-1

MICRONIX CORP.

Transmission characteristics test of wireless equipments using an antenna in free air

(Capable of the pure transmission characteristics evaluation because of no leakage of test radio wave to the outside and no multi-pass in the shielding box)



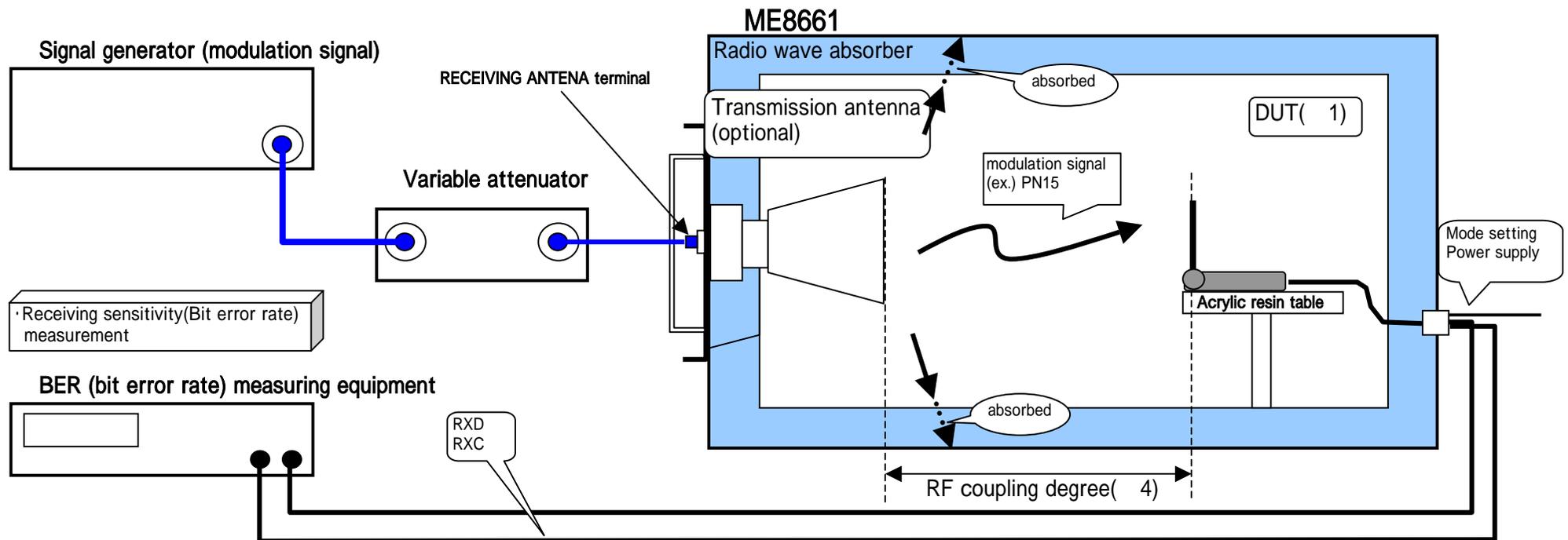
- The receiving antenna installed at the opposite side of DUT receives radio wave radiated from DUT, which is put on an acrylic resin table, and then the receiving signal is output to RECEIVING ANTENNA terminal.
- The evaluation of transmission characteristics of wireless equipment is performed by connecting a spectrum analyzer or a microwave frequency counter to RECEIVING ANTENNA terminal.

" mark" should be refer to "Supplementation for Shielding box Application"

ME8661/ME8662: Shielding box (electromagnetic anechoic box) Application-2

MICRONIX CORP.

Receiving sensitivity test of wireless equipments using an antenna in free air
 (Capable of the receiving sensitivity measurement without influence of noisy circumstances)



- The signal modulated by PN15 or etc which is output from a signal generator is input to **RECEIVING ANTENNA terminal** through a variable attenuator.
- This radio wave modulated is radiated from a transmission antenna installed at the opposite side of DUT toward DUT. (DUT is in a receiving mode)
- **RXD** and **RXC** output from DUT are input to **BER measuring equipment**. And the error rate is measured by changing the attenuation of a variable attenuator.

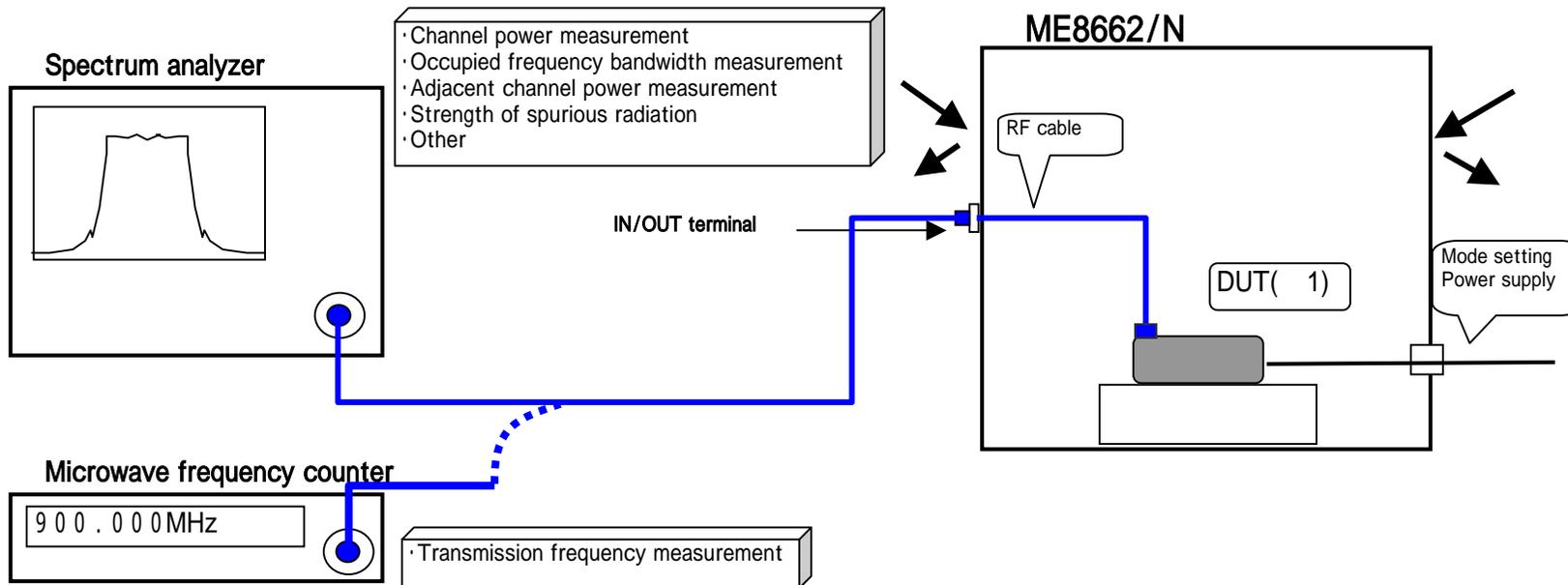
" mark" should be refer to "Supplementation for Shielding box Application"

ME8661 / ME8662 : Shielding box (electromagnetic anechoic box) Application-3

MICRONIX CORP.

Transmission characteristics test of wireless equipments by cable connection

(Capable of transmission characteristics test preventing the leakage of test radio wave to the outside and cutting off the noise radiated outside.)



- RF cable is connected to RF terminal of DUT put in the shielding box and led to the outside of the shielding box through IN/OUT terminal.
- The evaluation of transmission characteristics of wireless equipment is performed by connecting a spectrum analyzer or a microwave frequency counter to IN/OUT terminal.

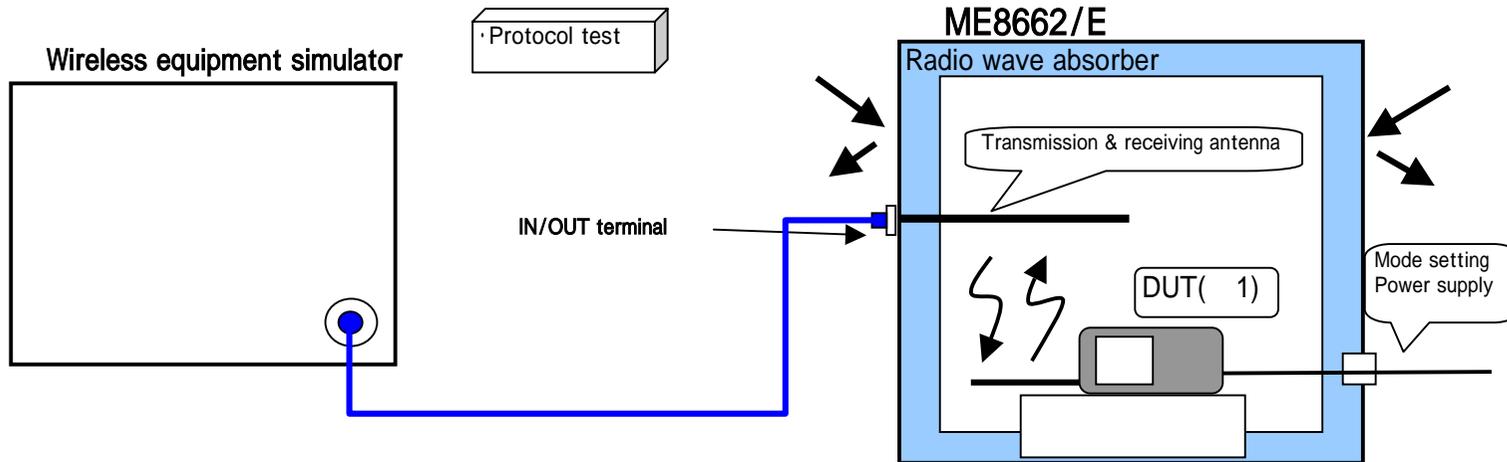
" mark" should be refer to "Supplementation for Shielding box Application"

ME8661 / ME8662 : Shielding box (electromagnetic anechoic box) Application-4

MICRONIX CORP.

Protocol test of wireless equipments using an antenna in free air

(Capable of protocol test using an antenna in free air and a dedicated simulator, cutting off the influence of the outside)



- Make a conditions that DUT put in the shielding box and wireless equipment simulator can mutually communicate through transmission & receiving antenna.
- Each of protocol test is performed using wireless equipment simulator.

" mark" should be refer to "Supplementation for Shielding box Application"

Supplementation for Shielding box Application

(1) DUT	Such cellular phones as W-CDMA of 3G, PDC and GSM / 2.4GHz and 5GHz wireless LAN / Bluetooth / ETC / etc are main targets.
(2) Receiving antenna	The antenna must be selected to suit to frequency and polarization of DUT. MICRONIX is able to select and install an antenna instead of user. (optional or user handling)
(3) AMP	The transmission signal must be amplified by AMP when the transmission power of DUT is small or the precise measurement is required due to test item. (optional or user handling)
(4) RF coupling degree	When the measured value of power must be guaranteed at the absolute value, the system loss from the installing position of DUT to a measuring instrument must be known. At that time, RF coupling degree from the installing position of DUT to RECEIVING ANTENNA terminal is measured using a reference antenna with known antenna gain and put at DUT position. (optional or user handling)

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