



**The Audio Mixer from Switzerland**

***User Manual***

For mixers with SN starting MI012XXXXXX

**Dear Customer,**

We are pleased to take the opportunity to explain this new mixer in detail to you. Although, it is our opinion that the mixer explains itself and every experienced sound engineer will be able to utilise it immediately.

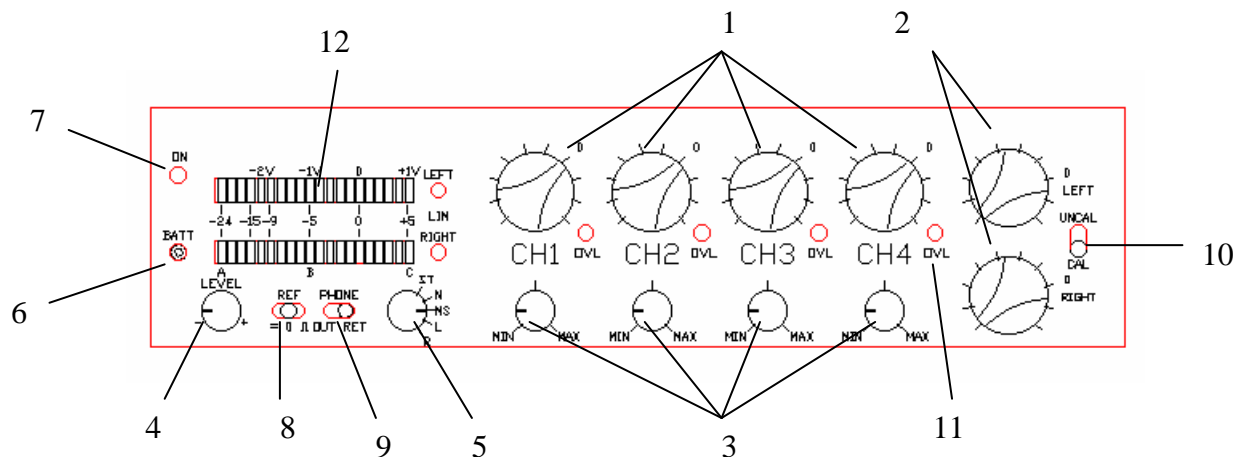
So, should you not have the time to read these four pages, because the mixer was delivered at the latest minute or, because you are one of those reading user manuals only in case of problems, you may insert a battery in the machine, switch it on and start mixing.

**The following points need to be respected:**

- The adapter for the Radio transmitter is delivered with the necessary small circuitry allowing you to adjust the audio output level accordingly to your Radio equipment. Ask the supplier of the Radio transmitter by how much the mixers audio signal needs to be attenuated. (output level mixer: 0dBu).
- When opening the cover plate of the mixer, make sure nothing drops into the mixer. Damage to the circuitry or mechanics, caused by such objects may not be repaired under guarantee.
- Modifications of the mixer, be it mechanically or electronically shall only be executed by authorised distributors or the manufacturer. Every intervention, executed by non-authorised people or companies may cancel all guarantee.

Well, if you've got the time.....the short description of the mixer starts on the following page. Tests, realised with different people, have shown that the eight pages can be read before fatigue has a chance to overcome you.

## Front panel



1. **4 Level control knobs for microphone and line - inputs.**  
Switches on the control-panel allow channel 1 and 2 as well as channel 3 and 4 to be electronically linked. This allows a one-knob-control of two channels.
2. **2 Level control knobs for the outputs**  
Both output channels may be linked for one-knob-control.
3. **4 Control knobs for microphone preamp gain control**
4. **„LEVEL“**  
Control of headphone level (left knob below the display)
5. **Monitoring switch**  
for Left, Right, Mono, Stereo or MS Monitoring over the headphone.
6. **„BATT“**  
Push-button for battery-level (Left hand side of the display)  
Fully charged battery shows illuminated LED. Every diode less signifies a drop of tension of 0,2V with 0 = 12V
7. **„ON“**  
On/Off status indication
8. **„REF“**  
Reference tone – switch with three positions  
Left position (fix) = continuous tone of 1 kHz  
Right position (momentary) = 1 kHz tone as long as switch is maintained in position.  
Middle position = reference tone out

**Precision tuning of the Reference tone:** Mystère allows you to adjust the reference tone with the precision of 0,2 dB. As soon as the „REF“ switch is activated, 2 LEDs illuminate on each channel. The left LED indicates at -9, -12 or -18 dB, depending on the chosen reference level. The right one shows the deviation of the signal with a precision of 0,2 dB. Adjust the LED to the 0-position on the display using the Master out buttons.

**9. OUT / RET**

Switch for tape return to headset monitor

**10. UNCAL CAL**

Switch for calibrated output (aside output level control)

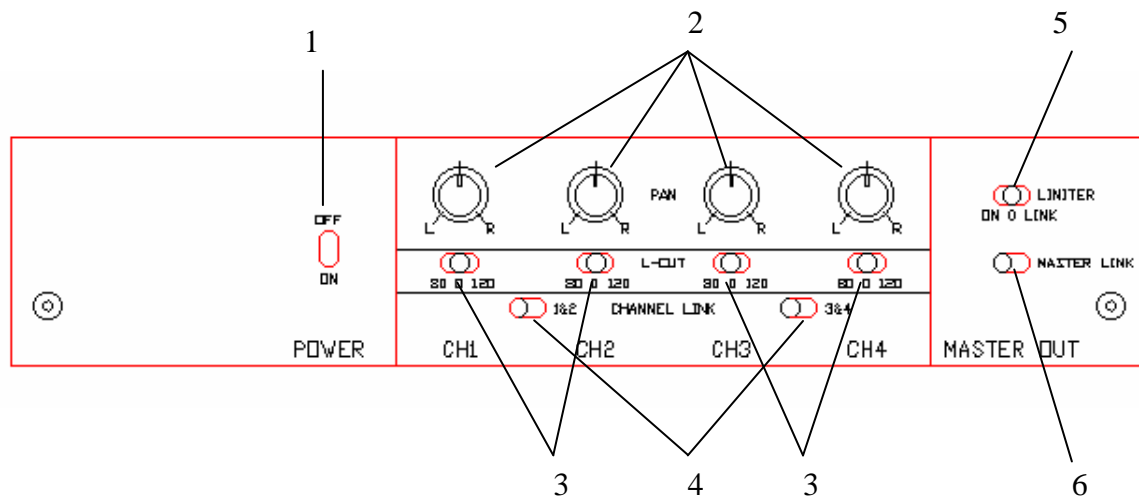
CAL = + 6dB (in accordance with position „0“ of the output level knobs) activates 3 dB before clipping

**11. „OVL“**

Overload indication of the microphone input (1 LED each channel) 3 dB before clipping

**12. Display 20 segment LED**

The LED cover the range from +5dB to -24dB. Incremented in 1 dB steps from -9 bis +5dB

**Control panel****1. POWER**

ON/OFF – Switch of the mixer

**2. PAN**

Panorama–potentiometers for sweeping input between left and right outputs

**3. L CUT**

Filter on Inputs 80 Hz or 120Hz, 12 dB/ Octave

**4. LINK**

Switch for linking channels 1&2 respectively 3&4 (One-knob-control of 2 channels)

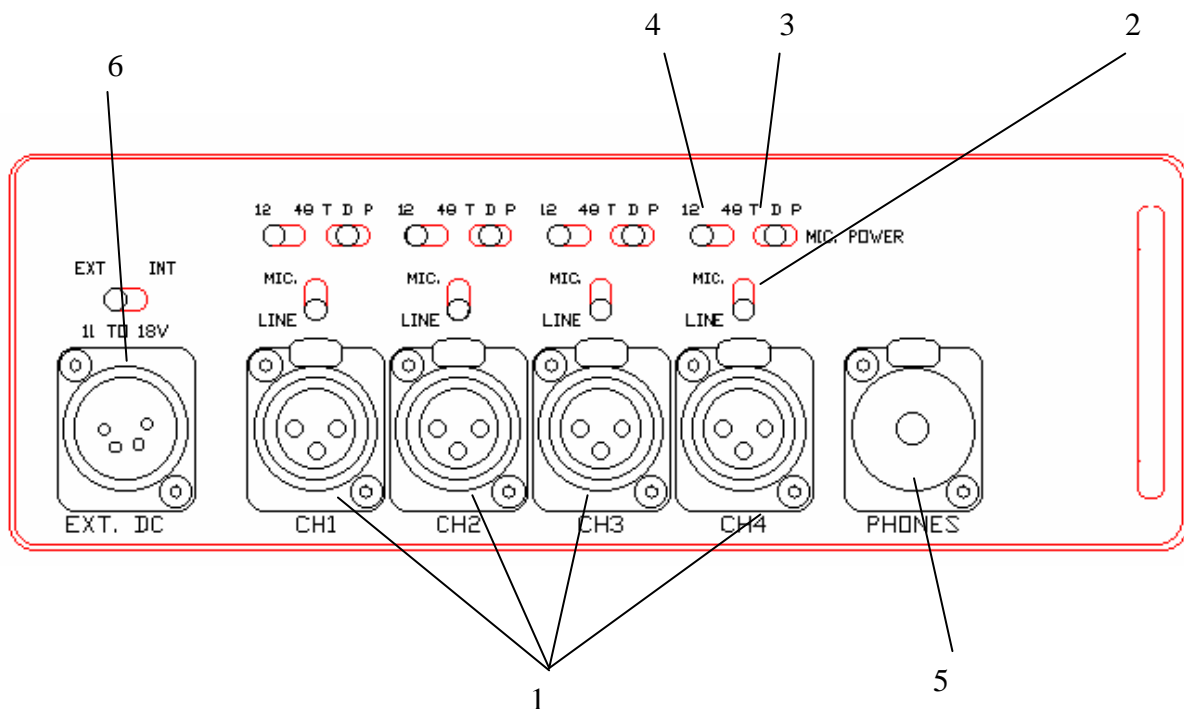
**5. LIMITER**

Selector-switch for limiter “ON” channel separated, “Link” channel linked (stereo mode) or “0” for off.

**6. MASTER LINK**

Switch for linking master-outputs L & R. (One-button-control of both channels)

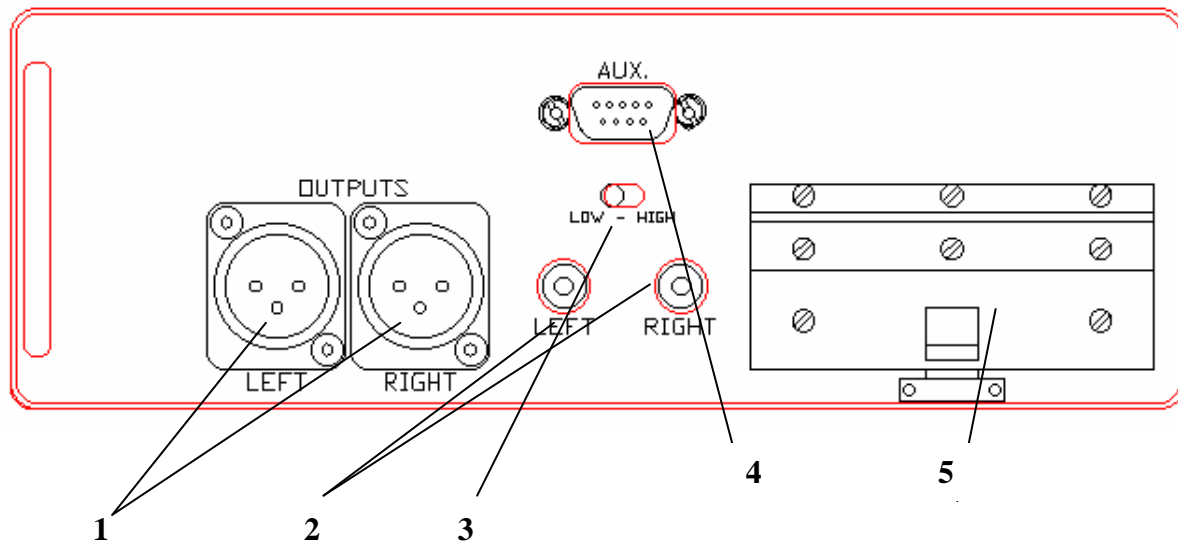
## Input-Panel (left hand side)



1. **CH1 - CH4**  
Input connectors (XLR, fem)
2. **MIC. / LINE**  
Selector switch for microphone or line-level-input  
**The inputs are transformer balanced universal inputs accepting any signal from nil to +21 db**
3. **T D P**  
Selector switch for microphone type (**T**onader (parallel), **P**hantom **D**ynamic)
4. **12 / 48**  
Selector switch for microphone powering voltage
5. **PHONES**  
Headphone output (Jack ¼")
6. **EXT / INT**  
Input for external power supply (11–18V) Pinning: 1&2 ⇒ GND  
3&4 ⇒ +

This input is protected by a DC-converter, which lowers the voltage by 1,4 V. Therefore, external batteries, used to power the mixer, need to be of minimum 13,2 V nominal tension. (max. 18 V) for adequate life. Minimum external voltage of 11 V needed to power the unit.

## Output – panel (right hand side)

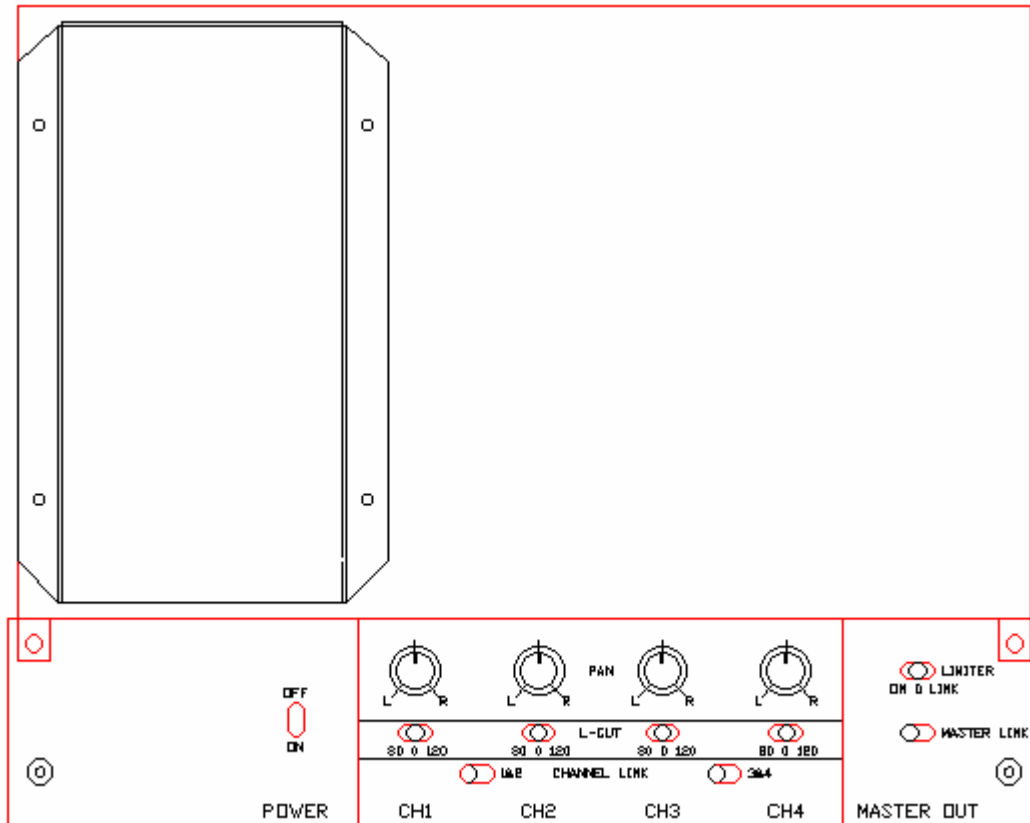


1. Audio Outputs L/R (Master) on (XLR male) +6 dB
2. Low lever outputs, unbalanced L/R on Cinch (0 or –40 dB available)
3. Selector switch for level of Cinch-output LOW –40dBu, HIGH 0 dBu
4. 9-pin D-SUB connector AUX providing additional stereo output, input for tape-return and a 12V battery tension output (unregulated):

### Pinning:

- 1 Out right high
  - 2 Free
  - 3 Out left low
  - 4 Tape in left
  - 5 Tape in right
  - 6 Out right low
  - 7 Out left high
  - 8 AGND
  - 9 Battery-tension
5. Opening for battery housing. All batteries of the NP1-Type can be used.

## Cover



The cover of the “Mystère” is secured with two screws against the control-panel. If the adapter for the Radio-Mike-Transmitter has been purchased, a 9-pin connector is installed on the cover. This connector has the following pinning:

- 1 Out left 0 dBu
- 8 + 12V
- 9 GND Audio
- 15 GND powering

Opening the cover gives access to all necessary test points for function control of the unit. The DIP switches for defining the reference level or the ballistics of the display are also accessible on the same board.

## Reference – tone

The reference tone for levelling can be customer set to three different levels on the DIP-switches S3 and S4 on the main board below the cover (See page 8)

## Ballistics of the Display

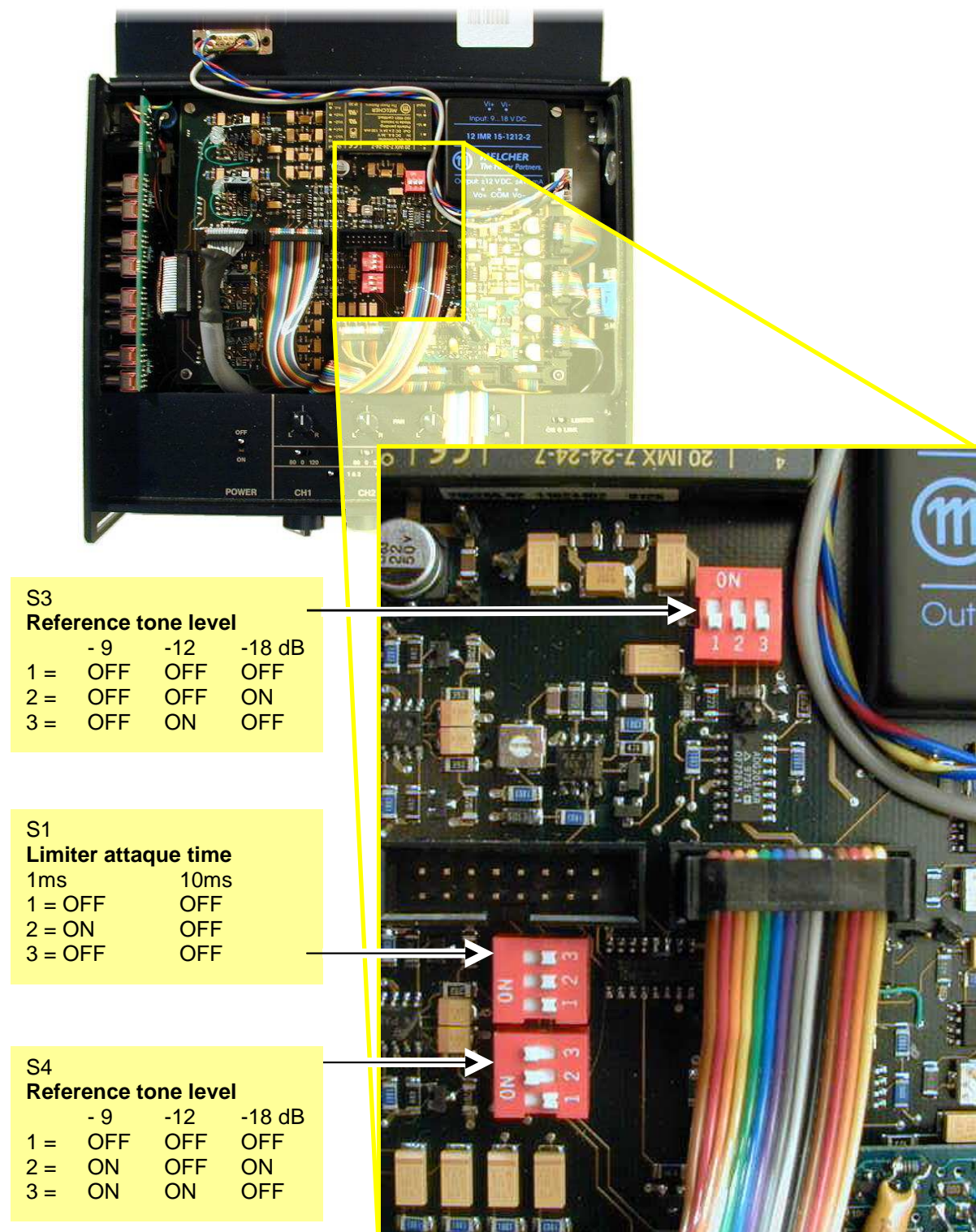
Two ballistics can be set over the DIP-switch S1. For applications in digital surrounding, we recommend the use of the fast ballistic of 1ms attack time. The factory setting is 1ms.

The switches are located close to the connector J4, which is photographically illustrated on page 8. To access the dip switches on the board you proceed as described hereafter:

- 1. Switch off the unit.**
- 2. Unscrew both screws, securing the cover (Attention, these screws could fall off and get lost) and open it. The switches S1 and S4 are located below the connector J4 underneath the flat cable. Switch S3 is easily accessible below the DC-Converter U46.**
- 3. If needed disconnect the flat cable.**
- 4. Switch to the desired setting.**
- 5. Connect the cable again, close the cover and secure it with the two screws.**
- 6. Switch on the unit.**



## Internal dip switch configuration



## How to install the HF Transmitter Interface

The adapter is designed to receive different types of transmitters and to enable the use of systems which are already in the possession of the customer. Almost all of these transmitters offer a plug-in connector and have the audio input connector located on the same side as the antenna. Therefore, we decided to keep our design strictly to the minimum allowing connection of most existing RF equipment. However, some mechanical modification may be needed to adapt each different make and model of transmitters.

### Connecting Sennheiser SK series



Each adaptor kit, whether delivered with the mixer or separately, includes a small printed circuit board with a 15 pin D-sub connector. This PCB accepts resistors to attenuate the mixer's 0dBu output to the sensitivity requirements of the particular radio transmitters input.



Use standard cables and attenuator resistors from your supplier of the transmitter and solder them on to the circuit.

Attach the circuit to the adaptor with two M 2.5 screws.

Then, attach the entire adapter assembly against the cover of the Mystère. Connect your transmitter via the cable and slide it into the opening of the adapter.



Some of our customers simply slide the transmitter in using the belt clip to hold it against the adapter. Others prefer to use rubber foam with the necessary thickness to have the transmitter held tight within the adaptor.

If you use rubber foam, make sure it is water rejecting for protection of both the mixer and transmitter.

- The circuitry is protected by a fuse to avoid damage to your equipment. However, as our guarantee may be refused in case of damage caused by non authorised people, we recommend to have this installation done by your nearest authorized Mystère – dealer.

