

## Battle shark

### I. GAME INSPECTION

Battle Shark has been thoroughly tested and readied for operation at the factory and should not require any special set-up procedure. It is suggested that you examine the following upon receiving your game:

- [ ] Plug-in connectors firmly seated
- [ ] Terminals still connected at control panel, coin door, etc.
- [ ] No loose connectors or components on p.c. boards
- [ ] Fuses installed firmly in holders
- [ ] Coin mechanisms still operating correctly
- [ ] No loose objects in the cabinet

Check the monitor bracing: as the monitor is generally the single most heavy item in the cabinet, damage from shipping will usually show there first. Check the cabinet for further damage.

If problems do occur, or technical assistance is required, please call our customer service department at (708) 520-9280.

### II. SPECIFICATIONS

The game is shipped ready for operation at 120VAC.

#### POWER

line: 120V a.c, 60 Hz  
consumption: 250 WATTS (approximate)

#### MONITOR

type: 19" COLOR, RASTER-SCAN  
inputs: RGB, COMPOSITE NEGATIVE SYNC

#### CABINET DIMENSIONS

height: 73.75  
width: 26  
depth: 47

#### **CAUTION**

For safe operation it is strongly recommended the cabinet be properly grounded. The game is equipped with a three conductor power cable. The round "third prong" will ground the game when plugged into a grounded outlet. If an adaptor is used, be certain to attach the grounding lug or wire on the adaptor.

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### III. GAME INSTALLATION

Observe the following precautions when installing the game:

- Handle the game with care. It contains several relatively fragile components - the circuit boards, glass panels and picture tube (particularly the delicate tube neck and neck board).
- Do NOT install the game in direct sunlight, or near a heat source. Electronic failures increase exponentially with temperature. Direct sunlight can crack the smoked, tempered glass used in games.

Do not install the game in an area subjected to excessive dust or moisture. The electrostatic fields generated by the CRT attract dust like a magnet. An insulating layer of dust can cause an electronic component to run hot, and moisture can be detrimental or even dangerous.

### IV. GAME DESCRIPTION

You are in command of Battle Shark, the most gut-wrenchingly dangerous fast-attack submarine ever cranked out by the twisted minds at Deathfish Weapons Systems. Your mission is to carry out a series of quick strike engagements with an enemy force that has technological superiority and superior numbers. The Deathfish Weapons engineers learned from experience that a relatively quick, maneuverable submarine with a really huge supply of torpedos was the way to go.

The Battle Shark has the fastest crew in the fleet. They will ready torpedos for fire as nearly as quickly as you can pull the trigger, and can effect repairs to the ship even under battle conditions. The periscope rattles whenever the ship sustains a direct hit.

Additional fuel, armaments and ship repairs may be obtained by hitting the spherical bonus targets that appear occasionally. These are actually a set of three signal annunciators that show up on the main screen when a supply ship is near. Enemy torpedos may be destroyed in mid-path by one of your own torpedos. The objective is to destroy as many enemy ships and submarines as possible while working your way to the enemy base. You have to blast several major chunks out of the large base ships to get them to sink because they have the damage control doors sealed during combat situations.

## V.' TEST MODE

a

With the game off, turn on position 3 of dip switch A on the main PC board. When the game is switched on, a cross hatch and color bar pattern will appear on the screen. The cross-hatch pattern can be used for alignment. Adjust the neck ring magnets until colors overlap evenly all over the screen grid. The color bars may be used to adjust RGB screen drives. See the monitor manual included with the game for adjustment information. Lethal potentials are present in the monitor electronics, use extreme caution when making adjustments.

When the fire switch is pressed, the test mode screen changes to the periscope adjustment screen. The "X" mark indicates joystick position. Reach through the coin door to open the circuit board drawer cover. Remove the cover and slide out the board to access the X-Y control adjustment potentiometers. The controls may have a removable cover held in place with a butterfly nut. Adjust the potentiometers so the "X" mark on the screen reaches the limits of the square border when the periscope controls are moved in that direction. If there is a side of the alignment square that the "X" cannot reach, Battle Shark-will not be able to fire to the edges of the screen.

When the fire switch is pressed again, the screen comes up in test mode 1. Test mode 1 is a switch, motor and lamp test. Switch closure should be noted on the screen. Subsequent pressing of the fire switch access the lamp and motor tests.

The test mode drops to the test mode 2 screen with an additional fire switch closure. Test mode 2 runs checksum tests on the ROM, bit-pattern tests on the RAM and sound processor tests, as well as the additional switch tests not covered in mode 1 and the current settings of the dip switch banks.

# BATTLE SHARK

## Option Switch Settings

### DIP SWITCH A

FUNCTION	SETTING	1	2	3	4	5	6	7	8
NONE	MUST REMAIN IN "OFF" POSITION	OFF							
TEST MODE	NORMAL GAME TEST MODE			OFF ON					
ATTRACT SOUND	ENABLE DISABLE				OFF ON				
PLAY PRICING	1 CN - 1 PL 2 CN - 1 PL 3 CN - 1 PL 4 CN - 1 PL					OFF ON OFF ON	OFF OFF ON ON		
CONTINUE PLAY PRICING	SAME AS PLAY 1 CN - CONT 2 CN = CONT 3 CN = CONT							OFF ON OFF ON	OFF OFF ON ON

\* - FACTORY RECOMMENDED SETTINGS

### DIP SWITCH B

FUNCTION	SETTING	1	2	3	4	5	6	7	8
DIFFICULTY LEVEL	B - MEDIUM A - EASY C - HARD D - HARDEST	OFF ON OFF ON	OFF OFF ON ON						
SPEED OF SIGHT	A - NORMAL B - C - D - FAST			OFF ON OFF ON	OFF OFF ON ON				
NONE	MUST REMAIN IN "OFF" POSITION							OFF	

\* - FACTORY RECOMMENDED SETTINGS

CPU Btwtd

P4 ILK

1 GND

2 GND

3 GND

4 GND

5 GND

6 GND

7 GND

8 GND

9 GND

10 GND

11 GND

12 GND

13 GND

14 GND

15 GND

16 GND

17 GND

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19 GND

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43 GND

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46 GND

47 GND

48 GND

49 GND

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aN CPU SLIDE>

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GND

+SV  
RED

RD/1HT

BUC

GND

+SV

BU(

RED

INV--U..SV

FIRE SWITCH

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t i--JWIII

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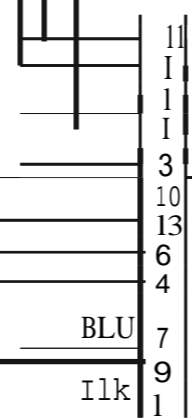
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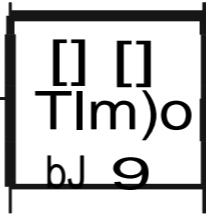


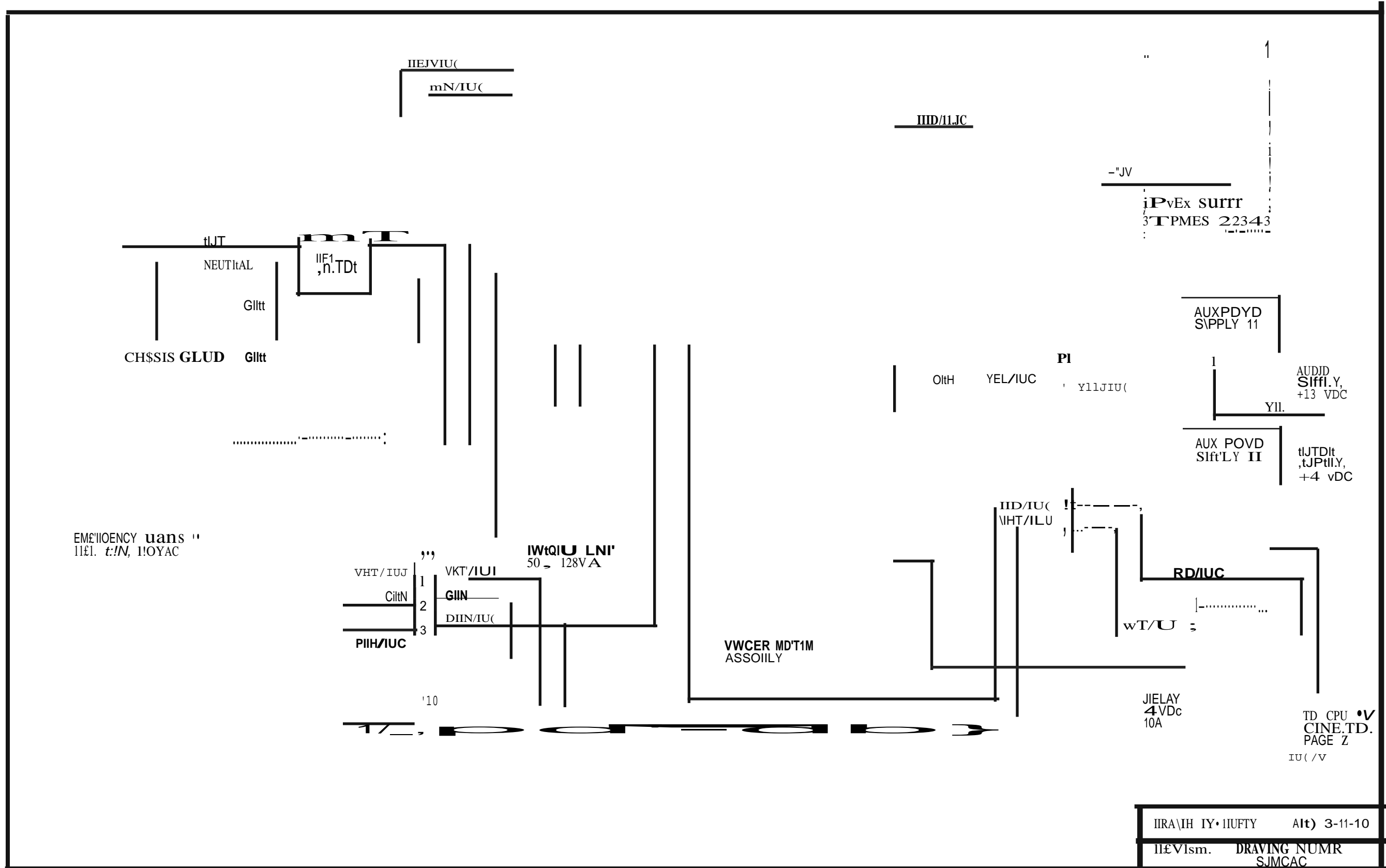
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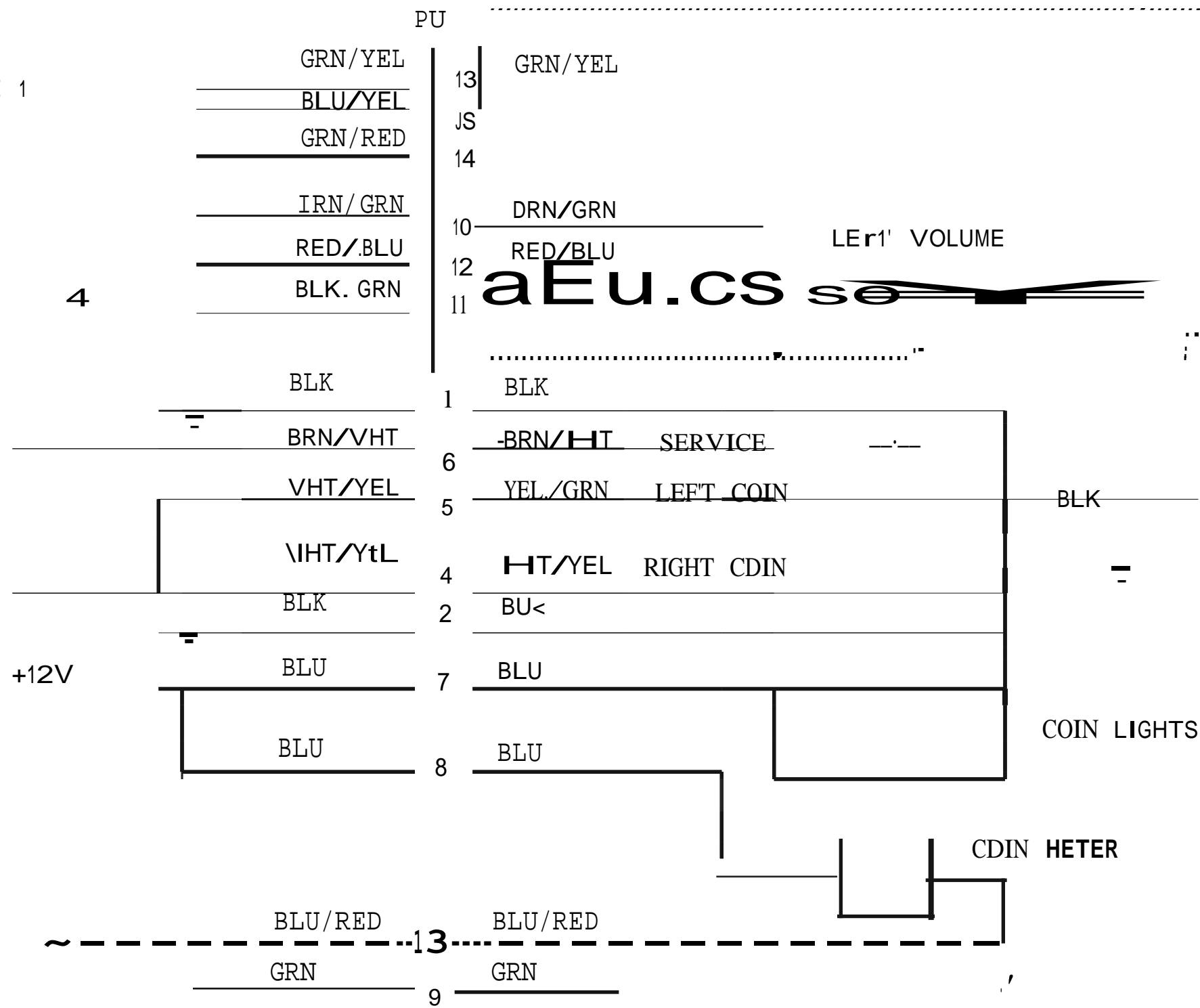
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TD CDJN DOOR  
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VOLUME ADJUST  
 PANEL, INSIDE.  
 COIN D R



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DRAWN BY DUFFY	DATE: 3-16-90
REVISION	DRAWING NUMBER SHDDIR

# BATTLE SHARK

## Option Switch Settings

PRELIMINARY

### DIP SWITCH A

FUNCTION	SETTING	1	2	3	4	5	6	7	8
NONE	MUST REMAIN IN "OFF" POSITION	OFF							
TEST MODE	*NORMAL GAME TEST MODE			OFF ON					
ATTRACT SOUND	*ENABLE DISABLE				OFF ON				
PLAY PRICING	1 CN = 1 PL 2 CN = 1 PL 3 CN = 1 PL 4 CN = 1 PL					OFF ON OFF ON	OFF OFF ON ON		
CONTINUE PLAY PRICING	<b>SAME</b> AS PLAY +1 CN = CONT 2 CN = CONT 3 CN = CONT							OFF ON OFF ON	OFF OFF ON ON

\* - FACTORY RECOMMENDED SETTINGS

### DIP SWITCH B

FUNCTION	SETTING	1	2	3	4	5	6	7	8
DIFFICULTY LEVEL	B - MEDIUM A - EASY +C - HARD D - HARDEST	OFF ON OFF ON	OFF OFF ON ON						
SPEED OF SIGHT	A - NORMAL B - +C - D - FAST			OFF ON OFF ON	OFF OFF ON ON				
NONE	MUST REMAIN IN "OFF" POSITION								OFF

\* - FACTORY RECOMMENDED SETTINGS