FALCON™



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TURBO 16 GRAFX™

THANK YOU !

...For buying this advanced TurboChip game card, "FALCON™"



Before using your new TurboChip game card, please read this instruction manual carefully. Familiarize yourself with the proper use of your TurboGrafx-16 Entertainment SuperSystem, precautions concerning its use and the proper use of this TurboChip game card. Always operate your TurboGrafx-16 SuperSystem and this TurboChip game card according to instructions. Please keep this manual in a safe place for future reference.

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TurboGrafx™-16 Entertainment SuperSystem
TurboChip® Game Card
TurboExpress™ Handheld Entertainment System

WARNINGS

1 **This video game may cause a burn-in image on your television picture tube. A burn-in image is an image which is permanently burned into the inside of the picture tube. Do not leave static or still images (in pause or play mode) on your television screen for extended periods of time. When playing this game, it is advisable to reduce the screen brightness to help avoid image burn-in on the picture tube.**
2 Be sure that the power is turned off when changing game cards.
3 This is a precision device and should not be used or stored under conditions of excessive temperature or humidity.
4 Do not forcibly bend your TurboChip game cards.
5 Do not touch the inside of the terminal area or expose the SuperSystem to water, as this might damage the unit.
6 Do not wipe your SuperSystem or TurboChip game cards with volatile liquids such as paint thinner or benzene.

TurboChip game cards are made especially for use with the TurboGrafx-16 Entertainment SuperSystem and the TurboExpress Handheld Entertainment System and will not operate on other systems.

Any duplication of this software is strictly prohibited.

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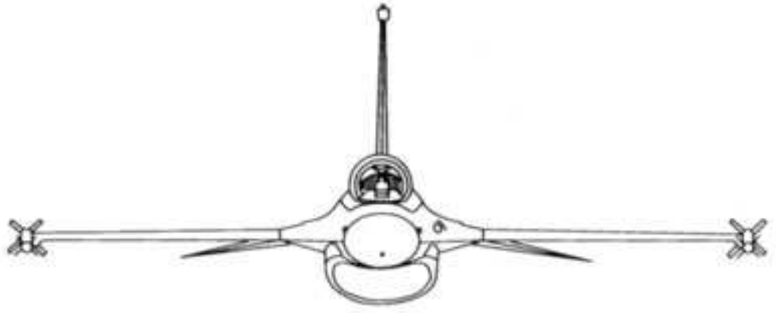
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Introduction

Falcon is a real-time simulation of an F-16 "Fighting Falcon" from the fighter pilot's point of view. The F-16 fighter aircraft is an advanced highly maneuverable air-to-air dogfighter, and has also won just about every bombing accuracy contest it entered.

Some of the less interesting details of flying an F-16 in combat have been deliberately left out or simplified. The emphasis of this game is more towards fun than absolute realism.

The Falcon you'll fly in this game is a simulation of an F-16 that does include many of the features of the actual aircraft : Air-to-air and air-to-ground weapons, Head-Up-Display, radar, threat warning systems, and the cockpit instruments. You'll be fiying your Falcon in a simulated combat environment, with enemy fighters, flak gunners, and SAM (Surface-to-Air Missile) launchers all trying to keep you from completing your assigned combat missions.



Object of the Game

Intelligence reports show that a terrorist group is trying to manufacture atomic bombs. "Your mission is to fight your way through their defenses, then find and destroy the bomb factory before they are ready." You must equip your F-16 with the proper armament, fly to the bomb factory, destroy all designated targets and return to home base. On your way, you must attack and evade enemy aircraft and ground threats. Missions involve air-to-air and air-to-ground combat and will get progressively harder as you close in on your final target. All missions require the correct choice of armament and equipment, plus the advanced flight skills and cool-headedness of an ace pilot. Training is available to help novice pilots. The overall object of the game is to complete all the missions, finish the game and get the highest score.

Games have a time-limit of one-week to complete. You must find a way to finish the game within this time period. If you manage to do so, you will be highly rewarded. The world depends on you! Good luck!

Preparing for Play

■ Inserting the TurboChip Game Card

1. Be sure that the power is turned off.
2. Remove the TurboChip game card from its plastic case.

Note : DON'T bend the game card or touch its metal parts. Doing so may damage the program.

3. Insert the card with the title side up into the Game Card Port.
4. Push the card in firmly until you feel a firm click.

■ Turning on the SuperSystem

1. Be sure that your game card is inserted properly.

Note : If your game card is not inserted properly, the Power Switch will not move all the way to the right.

2. Slide the Control Deck Power Switch to the "ON" position.

Note : If you want to turn off the SuperSystem during play, reset the game first by holding [RUN] button down and pressing [SELECT] button at the same time, and slide the switch to the "OFF" position.

Menu Selection

■ Selecting the Menus

1. Press the [RUN] button.The following menu screen appears.



2. Press the [DIRECTION KEY] up or down to highlight the menu you want to select.
3. Press the [RUN] button to make a selection.

■ The Menus

MISSION BRIEFING
In this menu, you will be briefed about your mission and select armament. Afterwards you will begin your combat mission. (See P.6)

LOAD/SAVE GAME
This menu is used to save and load game data. (See P.13)

TRAINING MISSION
This menu allows you to improve your combat techniques and flight skills necessary to succeed in combat missions (air-to-air and air-to-ground). (See P.15)

HIGH SCORES
This menu allows you to view the top five high scores. (See P.16)

HEAD-TO-HEAD
This menu allows two players to go head-to-head in a dogfight using two TurboExpress™ Handheld Entertainment Systems connected via an accessory cable. (See P.17)

Combat Mission

After you select armament for a mission you have been briefed on, you will begin your combat mission. Select "MISSION BRIEFING" on the Menu to begin the briefing.

Note : Press the [RUN] button anytime during the briefing to see the next screen. If you want to exit this menu, press the [SELECT] button.



■ Selecting Armament

As your selection will affect aircraft performance, select armament for the mission you have been briefed on referring to armament data or configuration shown on the screen.

1. Press the [Direction Key] up or down so that the armament item you want to select is shown on the screen.
2. Press the [Direction Key] left or right to set the number of items to be loaded.
   Note : Left to decrease the number, right to increase it. The II button will clear all armament off the aircraft, allowing you to start from scratch in selecting weapons.
3. When you complete your selections by repeating steps 1 and 2, press the [RUN] button.

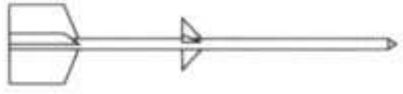
Your Falcon is taking off, and the combat mission will now begin.

■ Falcon Armament

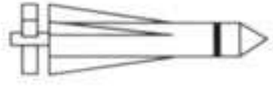
AIM-9J SIDEWINDER Heat-seeking missile
For air-to-air combat
Useful range 5 miles
For rear angle shots



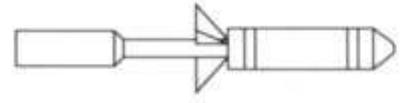
AIM-120 AMRAAM Radar-guided missile
For air-to-air combat
Long range, 15 miles
For front and rear shots



AGM-65B MAVERICK TV-guided missile
For air-to-ground combat
Effective range 9 miles, in good sight of target



AGM-45A SHRIKE
For air-to-ground combat
Effective range 12 miles
For attacking SAM sites



MK-82 LDGP Low drag general-purpose bomb
For air-to-ground combat
Effective when close to target



ALQ-131 ECM POD Electronic countermeasure device to defeat enemy missiles
For air-to-ground combat
Activates automatically during flight



300-GALLON FUEL TANK Additional fuel tank
Capacity 300 gallons

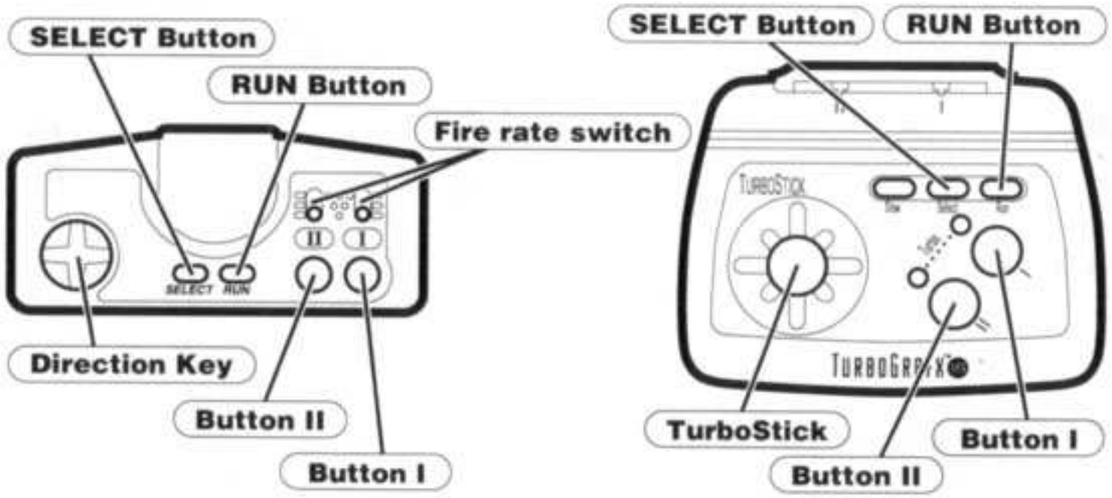


■ Controlling Falcon

All directional movement and weapons firing of Falcon, except during take off and landing, is controlled by your operation of the TurboPad™ controller or JoyStick™ High Performance Controller. You should master the operation of the controller you'll use for successful missions.

Note : Using a JoyStick™ High Performance Controller gives you better directional control of Falcon.
The I and II button fire rate swiches should both be in the bottom (smallest dot) position, or the plane will not fly properly.

■ Controller Description



■ Contoroller Operation

Flight control

1	nose down	
2	nose up	
3	roll left	
4	roll right	
5	Reduce throttle setting	I +
6	Increase throttle setting	I +
7	Nose slightly left without bank	I +
8	Nose slightly right without bank	I +

Firing operation

9	Select player weapon	SELECT
10	Fire selected weapon	II
11	Shift radar"lock" to next target	I + SELECT
12	Release a charge of flares/chaff to evade enemy missiles	I + RUN
13	"Eject" bails you out of the aircraft, ending the mission but saving your life so you can try again	I + II + RUN

Other operations

14	Pause/Unpause game	RUN
15	Reset game to start	RUN + SELECT

Note : **1,2,3,4** *These Direction Keys correspond to the stick.*
7,8 *No bank is useful for fine aiming, especially when bombing.*
11 *"Lock" is useful when there is more than one enemy plane in front of you and you need to pick which one the missile will track.*
12 *Dump chaff then turn or pull up hard when the missile gets close enough to light the "Threat" indicator.*

■ Falcon Cockpit

Once your Falcon has taken off, the screen will show the pilot's perspective from the cockpit. The main cockpit components are Head-Up-Displays (HUD), which shows important data, and the Front Panel. Familiarize yourself with them.



Airspeed Scale

G Force Meter

Horizon Ladder

Target Designator

Waypoint Direction Indicator

Altitude Scale

Compass Heading

RPM Indicator
Indicates increments of percentage power that the planes engine is producing at that moment.

LCK
Lights when an enemy plane has locked onto your plane.

Warning Light
Lights when your plane is about to break up from damage, giving you time to bail out.

STALL
Lights when you have pulled too many G's for your airspeed and altitude, causing your wings to "stall" or lose lift temporarily.

LNH
Lights when an enemy missile has been launched at you.

ECM (Electronics Counter Measure)
Lights when ECM pod is activated.

THR
Lights when an enemy missile is within seconds of hitting you.

Fuel Indicator
Indicates the amount of remaining fuel.

SAM
Lights when a SAM site is close enough to launched a missile at you.

Damage Indicator
Shows how much damage your plane can take.

AAA
Lights when a flak gun (Anti-Aircraft Artillery) is close enough to shoot at you.

Flare/Chaff
Shows the number of flares/chaff remaining on your plane.

Weapon Display Area
The weapon you have selected is shown.

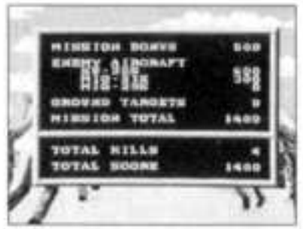
Radar
There are two operation modes, air-to-air and air-to-ground. Air-to-air mode has a maximum range of 40 miles. The following information is displayed : MIGs, distance to MIG, altitude of MIG, artificial horizon line, closure rate, MIG heading, MIG airspeed and aspect angle. Air-to-ground mode displays an image as seen through the AGM-65B Maverick missile.

■ Game Goal

Shows whether you succeeded or failed in your mission after all combat is over.



1. Press the [RUN] button.
   Shows the Mission Score Table.



2. Press the [RUN] to exit this menu. The initial menu screen appears.

Once you have finished a mission and returned safely to home base, you can advance to the next level for an even greater challenge.
You can be shot down and still continue the game if you bail out before your plane breaks up. The game is over once you are killed.

■ Game Over

If you die or run out of time, your game is over. Failing a mission merely forces you to fly it over, as long as you haven't run out of time. If your score is among the five highest, you will be allowed to register your name and score in the High Score Table. Follow the steps below to enter your name in the High Score Table.

1. Press the [DIRECTION KEY] up and down to move the letter you wish to choose into the highlighted area.
2. Press the [DIRECTION KEY] right to move the highlighted area to the next space.
3. Press the [RUN] button once you have finished entering your name by repeating steps 1 and 2 above.
   Your name and high score will be added to the High Score Table.

Note : If the system is turned OFF before game data has been saved, the High Score Table will be reset.

Saving or Loading Games

Game data may be both saved and loaded. A game may be saved in a mission by saving game data and restarted later at the same mission by loading that game data. Saving also retains your current High Score Table. Select "LOAD/SAVE GAME" on the Menu to enter. The "LOAD/SAVE OPTIONS" screen appears.



■ Saving Game Data

1. Press the [DIRECTION KEY] up or down to highlight "SAVE GAME" and press the [RUN] button. The "SAVE GAME OPTIONS" screen will appear.
2. Press the [DIRECTION KEY] up or down to highlight the desired item and press the [RUN] button. If you select "SAVE DATA", a Location List for saved data and password option will be displayed. A password will be given to you if you select "PASSWORD".

Note : Passwords (16 letters long) are needed when loading data saved with a password. Be sure to write down your password so you won't forget it.

■ Loading Game Data

1. Press the [DIRECTION KEY] up or down to highlight "LOAD GAME" and press the [RUN] button. The "LOAD GAME OPTIONS" screen will appear.
2. Press the [DIRECTION KEY] up or down to highlight the desired item and press the [RUN] button.
3. If you select "DATA LOAD", press the [DIRECTION KEY] up or down to highlight the data you wish to load and press the [RUN] button. If you select "PASSWORD" use the [DIRECTION KEY] to enter the 16-letter password for the game you wish to continue and press the [RUN] button. The data corresponding to that which you have selected will be loaded.

Note : Be sure to enter your password correctly. Data cannot be loaded without the proper password.

■ For TurboBooster Plus owners

You will have the option to do data loads and saves, and your high scores will be saved even when the machine is turned off.

Training Missions

Training missions allow you to improve the skills necessary to complete missions successfully. This includes five menus as follows. Select "TRAINING MISSION" on the Menu. The training menu screen appears.



■ Select the skills you wish to improve.

1. Press the [DIRECTION KEY] up or down to highlight the skill you wish to practice.
2. Press the [RUN] button to enter your choice. Training will begin.

■ Training Menu

bombing
Trains you in effective targeting techniques for the bomb.

intercept
Trains you to intercept and shoot down enemy bombers.

dogfight
Trains you in evading enemy aircraft and missiles and teaches you flight skills such as lining up behind enemy planes.

anti-flak
This trains you to evade enemy flak-gun fire and to destroy enemy flak guns.

anti-SAM
Trains you in proper anti-SAM (Surface-to-Air Missile) techniques and how to effectively attack SAM-sites.

Viewing the High Score Table

Select "HIGH SCORE" on the Menu. The High Score Table showing the names and scores of the best five recorded games appears.



Note : If the system is turned OFF before game data has been saved, the High Score Table will be reset.

Head-to-Head Game for Two Players

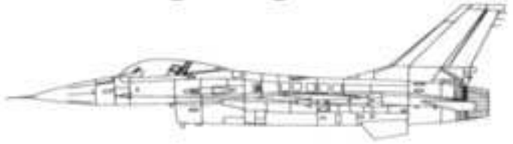
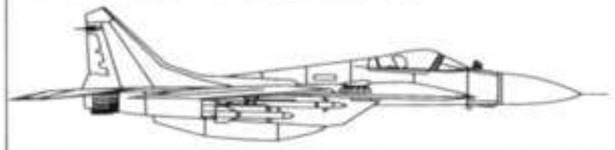
Two players can go head-to-head in a dogfight using two TurboExpress™ Handheld Entertainment Systems connected via an accessory cable. The following hardware is required for head-to-head play :

- Two TurboExpress™ Handheld Entertainment Systems
- One cable

Note : For details on connecting systems via a cable, refer to the TurboExpress™ Instruction Manual.

Select "HEAD-TO-HEAD" on the initial Menu.
During head-to-head dogfights, both player's planes are controlled just as during single-player games.

Appendix : Aircraft Specifications

	F-16A "Fighting Falcon" 	MIG-21 "Fishbed-N" 	MIG-29 "Fulcrum-A" 
Engine	Pratt & Whitney F100-PW-200 turbofan; 23,840 lb. static thrust with afterburner	Tumanskii R-25-300 turbojet 16,720 lb. static thrust	Two Tumanskii R-33D turbofans 11,250 lb. thrust;
Length	49 ft., 6.75 in. (with nose probe)	51 ft., 4 in.	59 ft.
Wingspan	31 ft., 0 in. (without missiles); 32 ft., 10 in. (with two missiles)	23 ft., 6 in. (without missiles)	39 ft., 6 in. spread 27 ft., 2 in. swept
Height	16 ft., 8.5 in.	14 ft., 9 in.	16 ft., 6 in.
Weight	Empty 14,567 lb.; Normal Takeoff (air-to-air with fuel and two missiles) 23,300 lbs.; Maximum Takeoff 35,400 lbs.	Empty 13,500 lb. Normal Takeoff 19,300 lbs. Maximum Takeoff 22,000 lbs.	Empty 22,500 lb. Normal Takeoff 37,000 lbs. Maximum Takeoff 41,500 lbs.
Max Speed	795 knots/hr (Mach 1.2) at Sea Level 1,172 knots/hr (Mach 2.05) at 40,000 ft.	730 knots/hr (Mach 1.1) at Sea Level 1,200 knots/hr (Mach 2.1) at 40,000 ft.	730 knots/hr (Mach 1.1) at Sea Level 1,320 knots/hr (Mach 2.3) at 40,000 ft.
Ceiling	Over 50,000 ft.	Over 50,000 ft.	Over 50,000 ft.

■ F-16 Armament

M61-A1 Vulcan Internal 20-mm Gun
AIM-120A AMRAAM Radar-Guided Missile
AIM-9J Sidewinder Heat-Seeking Missile
AGM-65B Maverick Missile
AGM-45A Shrike Missile
MK-82 500lb Low Drag Bomb
ALQ-131 ECM POD

■ MIG Armament

Gsh-23 Internal 23-mm Cannon
AA-2 Atoll IR-Guided Missile
AA-10 Alamo Radar-Guided Missile
SA-2 Surface-to-Air Missile

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   b) Repair or attempted repair by anyone not authorized by TTI;
   c) Any shipment of the product (claims must be submitted to the carrier);
   d) Removal or installation of the product; and
   e) Any other cause that does not relate to a defect in material or workmanship.
3. Any product as to which the TTI serial number has been altered, defected, or removed.

HOW TO OBTAIN WARRANTY SERVICE
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1. Damage to other property caused by this product, damages based upon inconvenience, loss of use of the product, loss of time, commercial loss; or
2. Any other damages, whether incidental, consequential or otherwise.

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- Bonk's Revenge™
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