



~ Preliminary ~

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YellowJacket™ Pro* Operating Instructions

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Introduction

The Iftron YellowJacket Pro is a highly versatile Diversity Receiver embodying advanced techniques and user configurable options. A few minutes spent understanding YellowJacket's capabilities will insure that you get the best possible performance.

Power Source:

YellowJacket can be powered from any DC source from 6 to 15 VDC capable of supplying 2.5 watts of power. Examples of acceptable power sources are:

- Iftron Mission Pak.™ Long run time battery with built-in charger
- Wall transformers from 6 to 15 VDC regulated
- 2 or 3 lithium ion or lithium poly cells
- 4 to 8 alkaline pen cells
- 5 to 8 Nicad or NiMH cells

Note that YellowJacket draws no power when turned off so you need not unplug the power source.

Connections:

- Connect a power source using a standard 2.1mm power jack (Center Positive).

- Connect a standard 1/8" (3.5mm) **Camcorder A/V cable** (yellow / red / white RCA plugs) to **Output1** and **Output2** as desired.
- ⊘ **Do not use an IPOD or Apple cable.** They look the same but they are not the same and will not work and may short the output.
- ⊘ **Do not use standard 2 circuit A/V (yellow / white RCA plug) cables.** These will not work and may short the output.
 - ↳ *YellowJacket features dual A/V outputs: **Output 1** and **Output 2**. Each output provides access to video and 2 side channels used for audio or data. **Output 1** and **Output 2** can be connected to recording or monitoring devices as the user sees fit. **.NO EXTERNAL SPLITTER AMPLIFIER IS NEEDED***
- Connect an optional microphone with a 1/8" (3.5mm) jack to the **MIC IN connection**.

Powering On and Off:

- To turn on, momentarily press the Pwr button.
- To turn off, press and hold the Pwr button. (You may also remove power to turn YellowJacket off. **Either way, your settings will still be saved**).

User Programmable Features:

YellowJacket Pro has 4 programmable features that can be configured at will. All features are accessed by the single pushbutton control located on the right side of the unit. All programming choices made during programming are automatically stored when power is removed and therefore will not need to be re-entered upon power up.

These features are:

1. Channel Group Selection
2. Channel Selection
3. Stealth Mode (system beeper mute)
4. Microphone Mixing Channel

All programming features except channel selection* share the following behavior:

- Press and hold 3 and 6 seconds to enter a menu
- Quick button pushes advance to the next selection within a menu
- Press and hold the button for 3 seconds to lock in the choice and exit a menu.
- YellowJacket will double-flash the channel lights to accept and store your choice
- Release the button to complete the operation

*Channel selection advances and stores your selection automatically with each quick push of the button when in normal operation.

Selecting a Channel:

First a word about channel organization: YellowJacket comes with 4 groups of channels stored in permanent memory, making a total of 16 possible channel selections. The reason for this organization is that most available transmitters including the **Iftron Stinger AVD™ transmitter** broadcast on a group of 4 frequencies and the YellowJacket channel organization makes for convenient tuning in the field.

Because many different manufacturers produce transmitters on very closely-spaced frequencies, tuning YellowJacket by the hunt and peck method is discouraged. By this we mean: tuning YellowJacket until you find your transmitter is a bad idea. The reason is that your transmitter and receiver frequencies could be different, but close enough for good reception at close range—but not at a distance! The best way is to know your transmitting frequency and to tune YellowJacket to it by using the chart below.

Selecting a Channel Group:

	Iftron Stinger			
	Group 1	Group 2	Group 3	Group 4
Displayed Channel	MHz	MHz	MHz	MHz
1	2.414	2.410	2.370	2.413
2	2.432	2.430	2.390	2.432
3	2.450	2.450	2.490	2.451
4	2.468	2.470	2.510	2.470

To program YellowJacket to receive a channel group do the following:

1. **Identify the channel group that you will be transmitting/receiving on from the chart above.**
2. **Turn on the unit by momentarily pressing the button.**
Observe that antenna channel LED's will light.
3. **Press and hold the button (~ 3 sec.) until the unit enters the channel group programming mode.**
YellowJacket will seem to turn off then turn back on in this special mode. Channel lights will flash quickly in a special pattern.
4. **Release button.**
The channel Led representing the present channel group will flash and a chirp may be heard.
5. **Quick pushes of the button will move the channel LED and corresponding group to the next selection.**
6. **Continue until the LED corresponding to the correct group is on.**
7. **Press and hold the pushbutton until your selection is accepted into memory (~3 sec.).**
Double flashes and beeps will acknowledge your choice.
8. **Release the button to restart YellowJacket with the new channel group.**
The new group will be remembered and loaded automatically upon all future start-ups until changed.

Channel Selection:

Momentarily press the button to advance to the next available channel.

Stealth Mode (system beeper mute):

1. Power off YellowJacket by holding the button for 3 seconds.
2. From the powered off position, press and hold the button for 3 seconds.
3. YellowJacket will turn on and then all channel LED's will come on.

4. **Momentarily push the button to select desired mode.**
Dim LED's and no beeps indicate Stealth Mode. Bright LED's and beeps indicate normal mode.
5. **Press and hold the button for 3 seconds.**
YellowJacket will acknowledge selection with double flashes and store to memory.
6. **Release button to restart in chosen mode.**

Microphone Audio Channel Selection:

(See Microphone Audio Channel Selection Strategies for details)

1. **Power off YellowJacket by holding the button for 3 seconds.**
2. **From the power off position, press and hold the button for 6 seconds.** *YellowJacket will bypass the Stealth menu and enter the Microphone Channel Select Mode.*
3. **Only one antenna LED will light indicating which audio output channel the local microphone is sent to.**
4. **Momentarily press the button to select the microphone channel.**
5. **Press and hold the button 3 seconds to acknowledge your choice and store in memory.**
6. **Release the button to return to normal mode.**

Microphone Audio Channel Selection Strategies:

Note: You may find it convenient to use the "stealth" mode when a microphone is used to avoid recording the system chirps.

YellowJacket Pro has a microphone input jack "**MIC IN**" on the left side of the case. This exclusive feature allows local comments to be added to the information received by the receiver in real time. This feature is invaluable for allowing commentary and observations to be recorded synchronously, along with picture, sound and data from the remote transmitter.

Besides video, YellowJacket Pro has 2 additional outputs. You may think of these as 2 stereo sound outputs or a sound and a data output. These outputs are normally used to output audio and/or data received from the Stinger AVD

transmitter. The user may program the YellowJacket microphone input to mix into either output channel. Thus, YellowJacket can:

1. Mix the local microphone to the same channel as the audio streaming from the transmitter, leaving the other channel free for data.
Local commentary will then be mixed with the received audio at a 50-50 volume ratio and output on a single audio channel. This leaves the other output available for data or other use. The received audio and commentary will be mixed together and can no longer be separately edited after recording.

or

2. If the data channel is not in use, YellowJacket Pro can send the local microphone to the unused output, so it is recorded separately from the audio received from the Stinger transmitter.

The audio from the transmitter and audio from the microphone are then output for recording on separate channels similar to stereo sound. The advantage here is that the sounds are on separate audio tracks which can be separately edited or volume adjusted for playback.

Note: Transmitters other than the Iftron Stinger that do not broadcast a second audio channel can not make use of this arrangement.