## III. Specifications

### a. Transmitter

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency</td>
<td>2.4GHz-2.4835GHz</td>
</tr>
<tr>
<td>Channel</td>
<td>4 Selectable channels</td>
</tr>
<tr>
<td>Video Input Signal</td>
<td>Video-1Vp-p (NTSC/PAL) Audio-1Vp-p (NTSC/PAL)</td>
</tr>
<tr>
<td>Video Input Impedance</td>
<td>Video-75 ohms Audio-600 ohms (NTSC)/10Kohms (PAL)</td>
</tr>
<tr>
<td>A/V Connections</td>
<td>A/V jack-RCA to RCA line jacks Or - AgCam Camera plug</td>
</tr>
<tr>
<td>Antenna</td>
<td>Dipole Antenna (Detachable: Optional antennas available)</td>
</tr>
<tr>
<td>Operating Voltage</td>
<td>DC 9V-12V/500mA power adaptor</td>
</tr>
<tr>
<td>Temp Limit</td>
<td>Not to exceed 120°F</td>
</tr>
</tbody>
</table>

### b. Receiver

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency</td>
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</tr>
<tr>
<td>Antenna</td>
<td>Dipole Antenna (Detachable: Optional antennas available)</td>
</tr>
<tr>
<td>Operating Voltage</td>
<td>DC 9V-12V/300mA power adaptor</td>
</tr>
</tbody>
</table>

## VI. Consumer Limited Warranty

Dakota Micro Inc. warrants to the first consumer purchaser that this Dakota Micro brand product will be free from defective workmanship and materials, and agrees that it will, at its option, either repair the defect or replace the defective Product or part thereof with a new or remanufactured equivalent at no charge to the purchaser for parts or labor for the period of Twelve (12) months.

This warranty does not apply to any appearance items of the Product nor to any Product the exterior of which has been damaged or defaced, which has been subjected to improper voltage or other misuse, abnormal service or handling, or which has been altered or modified in design or construction.

In order to enforce the rights under this limited warranty, the purchaser should follow the steps set forth below and provide proof of purchase to the servicer.

Neither the sales personnel of the seller nor any other person is authorized to make any warranties other than those described herein, or to extend the duration of any warranties beyond the time period described herein on behalf of Dakota Micro Inc.

The warranties described herein shall be the sole and exclusive warranties granted by Dakota Micro Inc. and shall be the sole and exclusive remedy available to the purchaser. Correction of defects, in the manner and for the period of time described herein, shall constitute complete fulfillment of all liabilities and responsibilities of Dakota Micro to the purchaser with respect to the Product, and shall constitute full satisfaction of all claims, whether based on contract, negligence, strict liability or otherwise. In no event shall Dakota Micro be liable or in any way responsible for any damages or defects in the Product which were caused by repairs or attempted repairs performed by anyone other than Dakota Micro. Nor shall Dakota Micro be liable or in any way responsible for any incidental or consequential economic or property damage. Some states do not allow the exclusion of incidental or consequential damages, so that above exclusion may not apply to you.

Any action at law, suit in equity, or other judicial proceeding for the enforcement of any warranty provided herein or otherwise, shall be instituted only in the Courts of the State of North Dakota, the laws of which shall govern.

This warranty gives you specific legal rights and you may also have other rights, which may vary from state to state.
Components:

Transmitter

Front: For additional video features other than AgCam

- Red = Audio Input
- White = Do not use, no function as the transmitter is mono only
- Yellow = Video Input

Rear:

- AgCam din plug. For use with the AgCam camera. This plug will power the AgCam and also feed the video signal.
- Dip Switches. 4 channels available. All switches must be in the up position except for one of the 4. For example if #1 is in the up position and all others are down it is going to transmit on channel 1, note that the receiver must be coded similar. For each camera used you must use a separate transmitter and receiver combination. You may use as many receivers as you need.
- Power plug: Supplies the ranch hand transmitter as well as AgCam camera. If it to be used on any other camera system you must provide power to the camera as well.

Receiver:

Front: For additional video display other than AgCam.

- Red = Audio Input
- White = Do not use, no function as the transmitter is mono only
- Yellow = Video Input

Rear:

- AgCam plug: For use with the AgCam Monitor. There is no need to use power other than that of the monitor when using on the AgCam Monitor
- Dip Switches: 4 channels available. All switches must be in the up position except for one of the 4. For example if #1 is in the up position and all others are down it is going to transmit on channel 1, note that the receiver must be coded similar. For each camera used you must use a separate transmitter and receiver combination. You may use as many receivers as you need.
- Power plug: Use provided power adapter when using on TV or other display equipment.

Note: Each Transmitter may only transmit signal from one camera, however you may receive that signal on multiple receivers

External Antenna:

If the “Ranch Hand is to be used in a building with steel sheeting, or if it is to be used in an area where obstructions need to be cleared for line of site signal, you may need to use an external antenna mounted to the outside of the building (do not mount the transmitter or receiver outdoor) It is recommended to use the antennas available through your Ranch Hand/AgCam dealer. Two antennas are available, a fixed mount dipole antenna with 8dbi boost for use on buildings and a magnetic mount dipole antenna for use on vehicles or shorter range transmission building to building. The use of any antenna other than ones specially tuned to the frequency of the Ranch Hand will likely result in poor performance and may cause damage to the unit. When selecting an antenna it is highly recommended to match the antenna on both transmitter and receiver for best results.

Installation

The DM AgCam Ranch Hand Add on is a powerful wireless audio/video transmitter, which will allow you to view areas out of reach of cables. In selecting a location for the transmitter use the following guidelines

- Location within 2500 feet of receiver location
- Line of site, meaning that there is no obstruction such as a building or tree belt. Shorter ranges fewer than 300 feet are less critical of “line of site”, however steel buildings and steel walls will interfere with the signal. Walls constructed of wood and sheetrock are more transparent to the signal.
- Transmitter and receiver must be installed indoor in a dry location, for steel buildings you must use an external antenna available at your AgCam dealer.
- You may use the AgCam cables to mount the camera up to 160 feet from the transmitter, however AgCam cables are not able to carry audio signal, if you require audio you must obtain special cables from your dealer.

Transmitter:

When being used with the AgCam Camera, plug the AgCam Camera directly into the din plug on the back of the Transmitter and attach the provided power adapter (500MW). AgCam extension cables may be used to locate the camera away from the location of the transmitter.

Receiver:

When being used with the AgCam Monitor simple plug the din plug into one of the available AgCam Monitor din plug. Power the Monitor as instructed in the AgCam manual.

Caution: DO NOT use the front inputs and the AgCam (Rear) input at the same time, as serious damage will occur to the transmitter or receiver.

Power must be available for the Transmitter and Receiver, use only provided power supply or damage will occur, do not allow transmitter or receiver to get wet!